

# BARNETT & MAY

McArthur River Mine  
EPBC Compliance Audit

Prepared for  
**McArthur River Mining Pty Ltd**

Client representative  
**Samantha Fleming**

Date  
**26 September 2022**

Revision 0



# Contents

1		
1.	Introduction.....	4
1.1	Audit Objectives	4
1.2	Definitions	5
2.	Auditor Certification .....	6
2.1	Audit Details	7
3.	Audit process.....	8
3.1	Overview	8
3.2	Preliminary activities	8
3.3	Site audit	8
3.3.1	Opening Meeting	8
3.3.2	Site Inspections	9
3.3.3	Site Interviews	9
3.3.4	Document review	9
3.4	Reporting	10
4.	Statutory Compliance and Recommendations .....	11
4.1	Summary of Compliance Status	11
4.2	Non-Compliances and Recommendations	12
4.3	Status of Previous EPBC Audit Findings	15

## List of tables

Table 1 - Definitions .....	5
Table 2 - Auditor Certification .....	6
Table 3 - Audit Details and Scope .....	7
Table 4 - Compliance Assessment Matrix.....	10
Table 5 - Summary of EPBC Approval Compliance .....	11
Table 6 - Statutory Non-Compliances and Associated Recommendations.....	12
Table 7 – Observations and Recommendations for Improvement.....	14

## Appendices

**Appendix A — EPBC Compliance Table**

**Appendix B – Audit Photographs**

**Appendix C – Auditor Approval Letter**

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Prepared by — K. Holmes



Date – 26 Sept 2022

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**Revision History**

Rev No.	Description	Prepared by	Reviewed by	Authorised by	Date
<b>A</b>	Draft for client Review	K. Holmes	A. Wilkins	K. Holmes	5 July 2022
<b>0</b>	Final Issued to Client	K. Holmes	M. Holmes	K. Holmes	26 Sept 2022

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# 1. Introduction

The McArthur River Mine is an open cut lead and zinc mine, located approximately 970 kilometres south-east of Darwin in the Northern Territory. The mine is operated by McArthur River Mining Pty Ltd (MRM), a fully owned subsidiary of Glencore Australia.

MRM was granted approval under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC) on 30 January 2019, and a variation to that approval was varied on 18 December 2020 for the following Controlled Action:

*To manage the non-benign overburden and surface water at the McArthur River Mine through the reconfiguration of the Northern Overburden Emplacement Facility, through other Overburden Emplacement Facilities, use of the Tailings Storage Facility or alternative strategies, at the McArthur River Mine, 45 km south-west of Borroloola, Gulf Region, Northern Territory (See EPBC Act referral 2014/7210).*

The purpose of the audit, that was undertaken in accordance with the **Barnett and May's** proposal (dated 24 October 2021), was to determine compliance against the obligations contained in the EPBC Approval which states:

*Condition 10. The approval holder must ensure that independent audits of compliance with the conditions are conducted for the 12-month period from the commencement of the action and for every subsequent 12-month period or as otherwise requested in writing by the Minister.*

The Audit was commissioned on March 2022 following approval of the Auditor by DAWE.

The site inspection was undertaken by Ken Holmes (Accredited Lead Auditor) of Barnett & May between 27 to 28 May 2022. The audit covered the period from 13 November 2020 to 30 November 2021 (the Audit Period).

## 1.1 Audit Objectives

The objectives of this Independent Environmental Audit were to:

1. Assess compliance against the conditions of the EPBC Approval.
2. Review all relevant documentation required by the Approval.
3. Review the environmental performance of the development relevant to the EPBC Approval (EPBC 2014/7210, dated 18 December 2020)


## 1.2 Definitions

Table 1 - Definitions

Term / Acronym	Description
ACMP	Aquatic Ecology Management Plan
Action	The Action approved by EPBC 2014/7210
AR	Annual Review
B&M	Barnett and May Pty Ltd
EMS	Environmental Management Strategy
EPBC	(Commonwealth) Environment Protection and Biodiversity Conservation Act 1999.
DAWE	(Commonwealth) Department of Agriculture, Water and the Environment
DITT	(NT) Department of Industry, Tourism and Trade
EPBC	Environment Protection and Biodiversity Conservation Act 1999
IEA	Independent Environmental Audit
NOEF	Northern Overburden Emplacement Facility
OMP	Overburden Management Plan
RMP	Rehabilitation Management Plan
TSF	Tailings Storage Facility

## 2. Auditor Certification

Table 2 - Auditor Certification

Independent Audit Certification Form	
Development Name	McArthur River Mine
EPBC Approval	2014/7210
Description of Development	Open Cut Lead and Zinc Mine
Development Address	McArthur River, Northern Territory
EPBC Project Approval Holder	McArthur River Mining Pty Ltd / ACN 008 167 815
Title of Audit	McArthur River Mine 2021 Independent EPBC Compliance Audit
<p>I, Kenneth Holmes</p> <ul style="list-style-type: none"> <li>For environmental audits that are required by a condition of an Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) approval I certify that, to the best of my knowledge, all information provided in the audit report attached to this audit certification statement is true, correct and complete.</li> </ul> <p>I am aware that section 491 of the EPBC Act makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the regulations. The offence is punishable on conviction by imprisonment for not more than 1 year, a fine not more than 60 penalty units, or both.</p> <ul style="list-style-type: none"> <li>For directed environmental audits that are required pursuant to section 458 of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) I certify that, to the best of my knowledge, all information provided in the audit report attached to this audit certification statement is true, correct and complete.</li> </ul> <p>I am aware that section 461(4) of the EPBC Act makes it an offence in certain circumstances for an environmental auditor to include a statement in an audit report that is false or misleading in a material particular. The offence is punishable on conviction by imprisonment for not more than 6 months.</p>	
Signature	
Name of Lead/Principal Auditor	Ken Holmes
Address	49 Coba Point, Berowra Waters, NSW
Email Address	ken@baeckea.com.au
Auditor Certification	Exemplar Global 14065
Date	26 September 2022

## 2.1 Audit Details

Table 3 - Audit Details and Scope

<b>McArthur River Mine Independent EPBC Audit</b>	
<b>Audit Title:</b>	McArthur River Mine 2021 Independent EPBC Compliance Audit
<b>Client Contact:</b>	Samantha Fleming
<b>Position:</b>	Senior Environmental Advisor
<b>Client:</b>	McArthur River Mining Pty Ltd
<b>Client Email:</b>	Samantha.fleming@glencore.com.au
<b>Audit Team:</b>	Ken Holmes – Certified Lead Auditor
<b>Auditor’s Telephone:</b>	+61 438 046 261
<b>Auditor’s Email:</b>	ken@baeckea.com.au
<b>Date of Site Visit</b>	27-28 May 2022
<b>Audit Scope:</b>	<p>The audit was undertaken as per the brief outlined in the Barnett and May proposal (dated 24 October 2021). As such, the audit provides an assessment of the compliance of the project with the EPBC Approval.</p> <p>The scope of this audit was developed to meet the requirements of the Commonwealth Department of Agriculture, Water and the Environment (DAWE) Independent Audit and Audit Report Guidelines (DAWE 2019) and consideration of:</p> <ul style="list-style-type: none"> <li>• Relevant correspondence from DAWE (provided by the Auditee);</li> <li>• The Auditor’s experience in relation to relevant industry practices.</li> </ul>

## 3. Audit process

### 3.1 Overview

The audit process and methodology are summarised in this section, and comprised the following key undertakings:

- Preliminary planning activities
- Review of information and preparation of the Audit Criteria
- Site inspection and interviews:
  - Opening meeting
  - Site inspection
  - Review of relevant records
- Review of additional information provided after the site inspection
- Preparation of this audit report.

### 3.2 Preliminary activities

Off-site planning for the site audit comprised:

- Initial discussions with client representative, to organise the site inspection and access to audit documentation
- Prepare the audit compliance checklist
- Completion of a project specific Risk Assessment
- Review of online information
- Submission of a preliminary document / record request

### 3.3 Site audit

The site inspection component of the audit was undertaken over two days from 27 – 28 May 2022.

#### 3.3.1 Opening Meeting

Following site inductions, the opening meeting was held on-site. It was attended by the following personnel:

- Simon Longhurst – Superintendent Environment
- Samantha Fleming – Senior Environmental Advisor
- Cameron Machan – Senior Environmental Advisor Rehabilitation
- Samantha Hovar - Environmental Advisor Rehabilitation
- Ken Holmes (Lead Auditor) – Barnett and May.

Introductions were made, and the purpose and scope of the audit was outlined. An explanation of the audit process was communicated. That is, a site inspection, site interviews and detailed review of records in order to identify compliance with the approval conditions relevant to the current operations at the site.

The Auditee presented an overview of the site history, operations and status of rehabilitation.



### 3.3.2 Site Inspections

Detailed inspections of specific areas of the operation were subsequently undertaken. The site inspections included observation of:

- Tailings Storage Facility (TSF) Cells 1 and 2
- TSF Western Rock Quarry
- Site Perimeter Fencing
- Water Management Dam
- Northern Overburden Emplacement Facility (NOEF)
- Rehabilitation areas; and
- Surface water management infrastructure.

### 3.3.3 Site Interviews

Audit interviews comprised of a series of meetings with:

- Simon Longhurst – Superintendent Environment
- Samantha Fleming – Senior Environmental Advisor
- Cameron Machan – Senior Environmental Advisor Rehabilitation
- Jamie Hacker – Principal Engineer Projects
- Samantha Hovar - Environmental Advisor Rehabilitation

### 3.3.4 Document review

The Auditor provided MRM with a preliminary list of evidence (documents) required to assess compliance against the approved Audit Criteria on 25 April 2022. During the site visit, most compliance related documents required by the Auditor were not accessible. The Auditor subsequently requested further audit evidence in a series of emails between 28 April and 16 May 2022.

The Auditee's personnel assisted with the provision of documentation following the audit, through secure file transfer mechanisms. The key documents reviewed during this audit are listed in the EPBC Audit Table provided in Appendix A.

### 3.4 Reporting

A detailed EPBC Audit Table containing the approved Audit Criteria has been completed using notes and observations recorded during the site inspection / interviews and review of compliance documentation. The completed table is presented in **Appendix A**. A summary of the non-compliances identified during this audit are provided in Table 6.

*Table 4 - Compliance Assessment Matrix*

Assessment	Criteria
<b>Compliance</b>	<p>Compliance</p> <ul style="list-style-type: none"> <li>The site complies with the requirements of applicable pre-operational Consent Conditions.</li> <li>A judgment made by an auditor that the activities undertaken, and the results achieved fulfil the specified requirements of the audit criteria. While further improvements may still be possible, the minimum requirements are being met.</li> </ul>
<b>Non-Compliance</b>	<p>Non-Compliance</p> <ul style="list-style-type: none"> <li>Clear evidence has been collected to demonstrate the requirement has not been complied with and is within the scope of the audit.</li> <li>Site displays little or no evidence of compliance with the requirements of the regulatory documentation.</li> </ul>
<b>Not Applicable / Not Triggered</b>	The respective condition / requirement was not activated within the scope of the audit.
<b>Observation</b>	Observations relevant to the protection of a matter of national environmental significance when the issue is not strictly related to compliance or non-compliance with a condition or element of a condition.

## 4. Statutory Compliance and Recommendations

Compliance with the EPBC Conditions has been reviewed by assessing compliance against the various records and documents related to approval, as listed in Section 2.2 of this report. The Compliance Register presented in Appendix A provides a detailed review of the compliance status of the Action, including recommendations to address non-conformances.

### 4.1 Summary of Compliance Status

A summary of compliance with the requirements of the EPBC Approval is provided in Table 5 - Summary of EPBC Approval Compliance.

*Table 5 - Summary of EPBC Approval Compliance*

	No. of Conditions	Compliant	Non-Compliant	Not Triggered	Noted
EPBC 2014/7210	52	31	2	44	5

Note that the MRM operations is regulated under two EPBC Approvals. This audit assessed compliance against only the EPBC 2014/7210.

## 4.2 Non-Compliances and Recommendations

The assessment of compliance against all of the EPBC Approval Conditions as identified during the site inspection, interviews and document reviews are recorded in detail in the EPBC Compliance Table presented in **Appendix A**. The non-compliances identified, and associated recommendations are presented in Table 6 below. Observations and recommendations for improvement are provided in Table 7.

*Table 6 - Statutory Non-Compliances and Associated Recommendations*

No.	Condition	Determination	Recommendation
5b	<p>Within 18 months of this approval, a study to identify and characterise any hydraulic connection between the mine pit and the McArthur River. The study must assess how this connectivity could affect water quality in the McArthur River and include an assessment of potential management options to satisfy the requirements of condition 1, including how any material stored within the mine pit should be managed;</p>	<p>The study specified in Condition 5 b) has been undertaken and the report was submitted (transmittal letter /email sighted) to DAWE on 11 December 2020.</p> <p>The original EPBC Approval was issued on 12 June 2019. The Approval was varied by DAWE and reissued on 18 December 2020.</p> <p>The submission of the report to DAWE occurred within the 18-month timeframe specified in the Condition.</p> <p>DAWE provided comments on the report and requested the provision of significant further information and resubmission of the report for formal approval. At the time of this Independent Audit MRM had not finalised and submitted the report.</p> <p>The Auditor undertook a high-level review of the report and found the following:</p> <ul style="list-style-type: none"> <li>• Hydraulic connections between the mine pit and the McArthur River are identified and characterised in Sections 3.3 and 3.4 of the report. The report concludes that there is no current movement of water from the pit to surface water and that this situation will continue throughout the operational phase of the mine while the pit is actively dewatered. It is noted that after mine closure that connectivity between the pit (lake) and surface water will occur.</li> <li>• Assesses how this connectivity could affect water quality in the McArthur River.</li> </ul> <p>The report concludes that as there is currently no flux of groundwater (within the pit) to surface water and that this situation is expected to be maintained throughout mining, that no impacts on surface water quality will occur during the period of mining operations and therefore additional actions are required to protect surface water and in particular the McArthur River.</p> <p>The report does not however identify potential impacts on surface water post mining or provide options to satisfy the requirements of Condition 1. It is noted that DAWE in their review noted that the proposed flow through scenario (connection of the pit lake to the McArthur River, MRM's base case scenario, does not satisfy the requirements of the Condition 4 of the Approval. The study should therefore include characterisation of hydraulic links, impacts on surface waters and mitigation measures to be implemented post mining.</p>	<p>Revise the report (or prepare an addendum to the report addressing potential impacts on surface water post mining and provide options to satisfy the requirements of Condition 1.</p>

No.	Condition	Determination	Recommendation
Admin 19	All management plans required under this approval should be prepared in line with the Department's Environmental Management Plan Guidelines.	<p>The Aquatic Ecology Management Plan was reviewed against the requirements of Section 3 (Contents of the Environmental Management Plan) of the 2014 Guideline:</p> <p>Section 3.1 of the Guideline describes the requirements for the cover / title page of the plan. The AEMP does not meet the cover page contents requirements and a declaration of accuracy has not been included in the Plan.</p> <p>Section 3.2 of the Guideline prescribes the requirements for a document version control section that shows changes over the time. A document revision table has not been provided.</p> <p>Section 3.3 of the Guideline that requires the inclusion of a table of contents has been satisfied.</p> <p>Section 3.4 of the Guideline (Executive Summary / Introduction) has been satisfied.</p> <p>Section 3.5 of the Plan specifies the requirements for an approval reference table. A reference table has not been included in the Plan.</p> <p>Section 3.6 of the Guideline that requires the inclusion of a project description has been satisfied.</p> <p>Section 3.7 of the Guideline that requires the inclusion of environmental objectives has been satisfied.</p> <p>Section 3.8 of the Guideline requires the inclusion of roles and responsibilities. Environmental roles and responsibilities have not been included.</p> <p>Section 3.9 of the Guideline that requires a description reporting requirements has not been satisfied.</p> <p>Section 3.10 of the Guideline that requires the inclusion training requirements. No reference to training requirement is provided.</p> <p>Section 3.11 of the Guideline that requires the inclusion of emergency contacts has not been satisfied.</p> <p>Section 3.12 of the Guideline that requires the identification of environmental impacts and risks has not been satisfied.</p> <p>Section 3.13 of the Guideline that requires the inclusion of management measures has not been satisfied.</p> <p>Section 3.14, Audit and Review has been satisfied.</p> <p>Section 3.15 of the Guideline that requires the inclusion of a glossary has not been satisfied.</p>	Revise the Aquatic Ecology Management plan to bring it into line with the requirements of the Department's Environmental Management Plan Guidelines.

Table 7 – Observations and Recommendations for Improvement

No.	Condition	Determination	Recommendation
5a	<p>within 18 months of this approval, a study to determine the capacity for attenuation of metals and acid within the groundwater system. This study must estimate the available attenuation capacity and if, and when, this capacity will be exceeded. The study must have particular regard to the groundwater system beneath and impacted by the Northern Overburden Emplacement Facility and must also include other relevant areas of the site including the mine pit and Tailings Storage Facility. The study must include geochemical modelling that examines the effects on metal concentrations of oxidation of sulfur and depletion of buffering capacity. The study must include an assessment of potential management options that could be implemented if the attenuation capacity is exceeded and identify a suitable management option that will be implemented;</p>	<p>The study specified in Condition 5 a) has been undertaken and the report was submitted (transmittal letter /email sighted) to DAWE on 11 December 2020.</p> <p>The original EPBC Approval was issued on 12 June 2019. The Approval was varied by DAWE and reissued on 18 December 2020.</p> <p>The submission of the report to DAWE occurred within the 18-month timeframe specified in the Condition.</p> <p>DAWE provided comments on the report and requested the provision of significant further information and resubmission of the report for formal approval. At the time of this Independent Audit MRM had not finalised and submitted the report.</p> <p>The Auditor undertook a high-level review of the report and found the following:</p> <ul style="list-style-type: none"> <li>• The capacity for attenuation of metals and acid within the groundwater system is described in Section 4.2.</li> <li>• An estimate the available attenuation capacity and if, and when, this capacity will be exceeded is discussed in Sections 4.6 to 4.10.</li> <li>• The groundwater system beneath NOEF is discussed in Section 3.2 which also discusses the TSF and mine pit.</li> <li>• Geochemical modelling of metal concentrations, oxidation of sulphur and depletion of buffering capacity is discussed in Section 4.4.</li> <li>• The assessment of management options to be implemented if the attenuation capacity is exceeded is presented in Section 4.12.</li> <li>• The report does not include the mine pit and Tailings Storage Facility, although Section 3.2 of the Metal Attenuation Report provides a justification for focusing on only the NOEF.</li> </ul> <p>With regard to the final point above, DAWE did not, in their review, include reference to further consideration of the Open Pit and TSF domains. It is the Auditor's view that the final version report should include consideration this TSF and Open Pit, unless the exclusion of this information is explicitly approved by DAWE.</p>	<p>Revise the report to include the potential impacts from the mine pit and TSF or obtain approval from DAWE to limit the study and report on the NOEF.</p>

### 4.3 Status of Previous EPBC Audit Findings

This is the first Independent EPBC Audit of the McArthur River Mine, therefore there are no previous audit findings to review.

# EPBC Audit Table

Appendix A



CONDITIONS OF EPBC ACT APPROVAL

EPBC Approval Condition 1		To minimise impacts to EPBC Act listed species, the approval holder must:				
EPBC Approval Condition 1		a) Meet the objective of no impact to the health of the McArthur River as a result of the mine. b) Meet the outcome that the action does not cause impacts to the McArthur River that reduce the abundance or population health of EPBC Act listed species. The conditions below describe how both the objective and outcome are to be achieved by the approval holder, including through the establishment of appropriate methodologies, standards and baselines.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
1 a)	The Approval Holder must: Meet the objective of no impact to the health of the McArthur River as a result of the mine.	<ul style="list-style-type: none"> <li>• Review of environmental monitoring data / reports</li> <li>• Notices / Directions from Regulators</li> <li>• Site inspection</li> </ul>	1. Site inspection – The Auditor inspected the surface water sampling locations on the McArthur River, upstream and downstream of the mine and at two locations within the river diversion. At the time of the audit the river was not flowing. Surface water was, however, present in the water holes near each of the sampling points. The condition of the river, including riparian zones was consistent with that reported by MRM and the Independent Monitor. Photograph 1 shows the large waterhole at Surface Water sampling point SW7, upstream of the mine. Photograph 2 shows the river, which in this location was predominantly dry downstream of the mine at SW13.	1. Annual Report Card 2021 Independent Monitoring and Reporting on Data from 1 May 2020 to 30 April 2021, prepared by Advisan. 2. Environmental Monitoring Report 2020-2021, 1 May 2020 to 30 April 2021, McArthur River Mine, dated August 2021. 3. Compliance Report EPBC 2014/7210, 13 November 2020 to 12 November 2021. 4. Letter from Indo-Pacific Environmental (S Longbottom) to MRM (C Machan) titled “Consideration EPBC 2014-7210 Condition 1 requirements against monitoring program results”, dated 25 January 2022.	The Environmental Monitor (Advisan), an independent consultant appointed by the NT Government, reviewed the environmental performance of MRM, including a review of the impact of the mining operations on the health of the McArthur River for the period 1 May 2020 to 30 April 2021. That review concluded: <i>“There was no change in the health of the River System health in 2020. The river monitoring showed: ...That the McArthur River and its creeks are in good condition”</i> . During the audit period, MRM prepared the 2020-2021 Compliance Report (covering the period 3 November 2020 to 12 November 2021). That report provides an analysis of the environmental monitoring results for the reporting period and concluded: <i>“Overall, based on external experts’ and MRM’s review of environmental monitoring data and trends, it is concluded that the key environmental objectives are being achieved and the McArthur River is in a healthy condition”</i> . MRM commissioned Indo-Pacific Environmental Pty Ltd to review the monitoring results covering the audit period (letter attached to MRM’s Compliance Monitoring Report). Indo-Pacific Environmental concluded: <i>“Results from the current survey align with past conclusions, that there has been no observable decline in species diversity or abundances in waters upstream and downstream of the mineral lease, outside of that which could be considered natural variation. This in turn suggests that the McArthur River catchment is not being adversely influenced by current mining operations. Furthermore, these results suggest that the recovery of the McArthur River Diversion Channel is on a positive trajectory towards that of natural sections of the McArthur River, as a result of ongoing LWD installation and riparian revegetation undertaken by McArthur River Mining Pty Ltd (MRM)”</i> . Based on this Auditor’s observations during this audit and review of environmental monitoring reports covering the audit period, the conclusions of the Independent Environmental Monitor and Indo-Pacific Environmental are supported.	<b>Complies</b>

EPBC Approval Condition 1		To minimise impacts to EPBC Act listed species, the approval holder must:				Compliance Finding
		Verification Method	Evidence	Documents Sighted	Determination	
1 b)	The Approval Holder must: Meet the outcome that the action does not cause impacts to the McArthur River that reduce the abundance or population health of EPBC Act listed species.	<ul style="list-style-type: none"> <li>Review of relevant environmental monitoring data / reports</li> <li>Site inspection</li> </ul>	<p>1. Site inspection – The Auditor inspected the surface water sampling locations on the McArthur River, upstream and downstream of the mine and at two locations within the river diversion. At the time of the audit the river was not flowing. Surface water was, however, present in the water holes near each of the sampling points. The condition of the river, including riparian zones was consistent with that reported by MRM and the Independent Monitor. Photograph 1 shows the large waterhole at Surface Water sampling point SW7, upstream of the mine. Photograph 2 shows the river, which in this location was predominantly dry downstream of the mine at SW13.</p>	<ol style="list-style-type: none"> <li>Annual Report Card 2021 Independent Monitoring and Reporting on Data from 1 May 2020 to 30 April 2021, prepared by Advisan.</li> <li>Environmental Monitoring Report 2020-2021, 1 May 2020 to 30 April 2021, McArthur River Mine, dated August 2021.</li> <li>Compliance Report EPBC 2014/7210, 13 November 2020 to 12 November 2021.</li> <li>Letter from Indo-Pacific Environmental (S Longbottom) to MRM (C Machan) titled “Consideration EPBC 2014-7210 Condition 1 requirements against monitoring program results”, dated 25 January 2022.</li> </ol>	<p>The Environmental Monitor (Advisan), an independent consultant appointed by the NT Government, reviewed the environmental performance of MRM, including a review of the impact of the mining operations on the health of the McArthur River for the period 1 May 2020 to 30 April 2021. That review concluded: “There was no change in the health of the River System health in 2020. The river monitoring showed: ...That the McArthur River and its creeks are in good condition”.</p> <p>During the audit period, MRM prepared the 2020-2021 Compliance Report (covering the period 3 November 2020 to 12 November 2021). That report provides an analysis of the environmental monitoring results for the reporting period and concluded: “MRM has also achieved the overarching environmental outcome that the Action does not cause impacts to the McArthur River that reduce the abundance or population health of the EPBC Act listed Largetooth Sawfish or Gouldian Finch”.</p> <p>MRM commissioned Indo-Pacific Environmental Pty Ltd to review the monitoring results covering the audit period (letter attached to MRM’s Compliance Monitoring Report). Indo-Pacific Environmental concluded: “Results from the current survey align with past conclusions, that there has been no observable decline in species diversity or abundances in waters upstream and downstream of the mineral lease, outside of that which could be considered natural variation. This in turn suggests that the McArthur River catchment is not being adversely influenced by current mining operations. Furthermore, these results suggest that the recovery of the McArthur River Diversion Channel is on a positive trajectory towards that of natural sections of the McArthur River, as a result of ongoing LWD installation and riparian revegetation undertaken by McArthur River Mining Pty Ltd (MRM)”.</p> <p>Based on this Auditor’s observations during this audit and review of environmental monitoring reports covering the audit period, the conclusions of the Independent Environmental Monitor and Indo-Pacific Environmental are supported.</p>	Complies

EPBC Approval Condition 2		The Minister may determine that a plan, strategy or program approved by the Northern Territory Government satisfies the requirement for a plan, strategy or program required under these conditions.				Compliance Finding
		Verification Method	Evidence	Documents Sighted	Determination	
2	The Minister may determine that a plan, strategy or program approved by the Northern Territory Government satisfies the requirement for a plan, strategy or program required under these conditions.	Condition Noted – not auditable.			This condition relates to actions DAWE may take and does not require specific action from MRM.	Noted

EPBC Approval Condition 3		<p>To minimise impacts to EPBC Act listed species, the approval holder must not clear more than 7.1 ha of nesting habitat for the Gouldian Finch in the project footprint as part of this action, and the approval holder must:</p> <p>a) exclude cattle from at least 452 ha of potential foraging habitat for the Gouldian Finch; and</p> <p>b) establish key food grasses for the Gouldian Finch when rehabilitating the Tailings Storage Facility and Northern Overburden Emplacement Facility.</p>				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
3	To minimise impacts to EPBC Act listed species, the approval holder must not clear more than 7.1 ha of nesting habitat for the Gouldian Finch in the project footprint as part of this action	<ul style="list-style-type: none"> <li>Review survey data / reports</li> <li>Review of aerial photographs</li> <li>Site inspection</li> </ul>	<ol style="list-style-type: none"> <li>Interview (S. Fleming – Senior Environmental Advisor) – Figure 1 of the EPBC Act Approval 2014/7210 shows the Indicative Overburden Management Project footprint associated with the Action. Figure 1 also shows the mapped Gouldian Finch Nesting habitat within the Action footprint (refer to the hatched areas). The total area of Gouldian Finch Nesting habitat within the Action footprint is 7.1 hectares and therefore the Action can only disturb a maximum of 7.1 hectares of Gouldian Finch Nesting habitat. During the EPBC audit period (13 November 2020 -12 November 2021), no Gouldian Finch Nesting habitat was cleared under the EPBC Act Approval 2014/7210 Action.</li> <li>Audit Inspection: The Auditor inspected the Gouldian Finch habitat areas adjacent to the north and north-east of the site (to the north-east of the NOEF). The Auditor identified the areas potentially impacted by the Action from information provided in the EIS. The extent of clearing of those areas prior to and during the audit period was confirmed from a review of MRM clearing records and aerial photographs from August 2021 and September 2021.</li> </ol>	<ol style="list-style-type: none"> <li>Clearing Database (MS Excel Spreadsheet provided by MRM) covering the period 13 November 2020 to 12 November 2021.</li> </ol>	MRM clearing records provided by MRM indicate that 81.90 Ha of vegetation was cleared during the audit period, however no Gouldian Finch nesting habitat clearing occurred because of the works associated with the Action during the audit period.	Complies
3 a)	The Approval Holder must exclude cattle from at least 452 ha of potential foraging habitat for the Gouldian Finch.	<ul style="list-style-type: none"> <li>Site Inspection</li> <li>Review Management Plans</li> <li>Review site inspection reports</li> </ul>	<ol style="list-style-type: none"> <li>Audit Inspection: Perimeter Fencing along the northern, eastern and western edges of the mine, adjacent to the Carpentaria Highway and along the site access roads were inspected and found to be well maintained. Photograph 3 shows a typical section of perimeter fencing.</li> <li>Audit Inspection: No cattle were observed on or near the site during the audit.</li> <li>Interview (S. Fleming – Senior Environmental Advisor) – In accordance with the current Cattle Management Plan, MRM operates a Cattle Exclusion Zone around mining and operational areas. The Cattle Exclusion Zone currently excludes cattle from approximately 3,151 ha of potential foraging habitat for the Gouldian Finch.</li> <li>Interview (C Machan, Senior Environmental Advisor – Rehabilitation) – All site perimeter fencing has been upgraded during the last five years. MRM undertake weekly fence inspections (weather permitting).</li> </ol>	<ol style="list-style-type: none"> <li>Cattle Management Plan April 2018 – April 2019. The Cattle Management Plan (Figure 4 shows the area where cattle are excluded from the Gouldian Finch foraging habitat by the cattle management fence line.</li> <li>MRM Cattle Management Fence line inspections register - MS Excel Spreadsheet covering the period 2 April 2020 to 4 April 2022.</li> <li>MRM Aerial Muster-inspections register - MS Excel Spreadsheet covering the period 21 July 2014 to 24 December 2021.</li> </ol>	MRM has prepared and implemented a Cattle Management Plan. Inspection records sighted by the Auditor confirm that the plan is being actively implemented.  During this audit a majority of the perimeter cattle fencing was sighted and found to be in good repair.  MRM have securely fenced the site, including an area of 452 Ha of Gouldian Finch foraging habit and are actively managing cattle exclusion from that area.	Complies
3 b)	The Approval Holder must establish key food grasses for the Gouldian Finch when rehabilitating the Tailings Storage Facility and Northern Overburden Emplacement Facility.	<ul style="list-style-type: none"> <li>Review Rehabilitation Management Plan</li> </ul>	<ol style="list-style-type: none"> <li>Interview (S. Fleming – Senior Environmental Advisor) – Rehabilitation of the North Overburden Emplacement Facility (NOEF) and/or Tailings Storage Facility (TSF) has not yet commenced, however, this requirement is included in MRM’s Rehabilitation Management Plan for future implementation.</li> <li>The Rehabilitation Management Plan provides details of the plans for rehabilitation of the mine site, focussing on the McArthur River Diversion Channel, Barney Creek, the NOEF and the TSF.</li> <li>Section 6.5 of the RMP describes the Target Vegetation Communities to be established across each rehabilitation domain (including the NOEF and TSF). The rehabilitated NOEF will be a native grass conservation area and the TSF will be converted to a native grassy woodland habitat suitable for grassing.</li> <li>Section 6.6 describes the proposed revegetation species for the key domains, including the NOEF. Table 13 of the RMP details the proposed flora species that include key food grasses for the Gouldian Finch.</li> </ol>	<ol style="list-style-type: none"> <li>Rehabilitation Management Plan McArthur River Mine, Version 1.0, dated 31 March 2021.</li> </ol>	Rehabilitation of the NOEF and TSF will not commence in the near future therefore the assessment undertaken by the auditor consists of a review of the plans for rehabilitation as documented in the RMP.  The flora species specified in the RMP for rehabilitation of the NOEF and TSF include key food grasses for the Gouldian Finch.	Not Triggered

EPBC Approval Condition 4		To minimise impacts to EPBC Act listed species, the proposed pit lake, if developed, must remain hydraulically isolated from the McArthur River and its floodplain as there is not sufficient understanding of the potential risks associated with opening the proposed pit lake to the McArthur River. If in the future the pit lake is again proposed to be hydraulically connected to the McArthur River, a referral may be required for a decision to be made by the Minister under the EPBC Act.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
4	To minimise impacts to EPBC Act listed species, the proposed pit lake, if developed, must remain hydraulically isolated from the McArthur River and its floodplain as there is not sufficient understanding of the potential risks associated with opening the proposed pit lake to the McArthur River. If in the future the pit lake is again proposed to be hydraulically connected to the McArthur River, a referral may be required for a decision to be made by the Minister under the EPBC Act.	<ul style="list-style-type: none"> <li>Review of plans associated with the proposed pit lake.</li> <li>Review hydraulic connectivity (as documented in design reports)</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – MRM are proposing to establish a pit lake post mining, however, the lake will not be developed until after mining has been completed.	1. MRM Pty Ltd McArthur River Mine – Report Open Pit – McArthur River Hydraulic Connections, prepared by Pando Australia (Pty Ltd), date December 2020.	MRM are proposing to develop the pit lake after completion of mining. The lake will be hydraulically connected to the McArthur River. MRM’s consultants have reported that there are unlikely to be any significant impacts on the river from the pit lake. MRM propose to lodge a referral for the development of the pit lake in due course. This condition is not yet triggered (pending the submission of a Referral under the EPBC Act and future development of the pit lake.	Not Triggered
EPBC Approval Condition 5		To minimise impacts to EPBC Act listed species, by ensuring that acid and metalliferous drainage from the Northern Overburden Emplacement Facility, Tailings Storage Facility and mine pit does not present an unacceptable risk to the environment, the approval holder must submit the following completed studies to the Department for approval by the Minister: see 5 a) to 5 c) below. Upon approval by the Minister, the approval holder must implement any commitments made in an approved study and use the studies to inform the adaptive management plan required by condition 6. (The conclusions, recommendations and commitments in the study required by condition 5(c) must be included in a revised version of the adaptive management plan).				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
5 a)	within 18 months of this approval, a study to determine the capacity for attenuation of metals and acid within the groundwater system. This study must estimate the available attenuation capacity and if, and when, this capacity will be exceeded. The study must have particular regard to the groundwater system beneath and impacted by the Northern Overburden Emplacement Facility and must also include other relevant areas of the site including the mine pit and Tailings Storage Facility. The study must include geochemical modelling that examines the effects on metal concentrations of oxidation of sulphur and depletion of buffering capacity. The study must include an assessment of potential management options that could be implemented if the attenuation capacity is exceeded and identify a suitable management option that will be implemented;	<ul style="list-style-type: none"> <li>Determine status of the study</li> <li>Review Study Scope</li> <li>Review evidence of submission of the report to DWE</li> </ul>	<p>EPBC Condition 5a Metal Attenuation Final Report December 2020, prepared by Klohn Crippen Berger.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The study addressing condition 5a was provided to the Department on 11 December 2020. The study has not yet been approved by the Minister. Comments have been received by DAWE and MRM are currently working through the DAWE comments.</p>	<ol style="list-style-type: none"> <li>McArthur River Mining Pty Ltd, EPBC Condition 5a – Metal Attenuation Final Report, prepared by Klohn, Crippen Berger, dated December 2020.</li> <li>Letter from MRM (A Hatfield) to DAWE (<a href="mailto:audit@environment.gov.au">audit@environment.gov.au</a>) titled “McArthur River Mine – EPBC 2014/7210 Conditions 5a and 5b Reports.</li> <li>McArthur River Mine (EPBC 2014/7210 – Preliminary Comment on Plans, prepared by the DAWE. The document provides the Departments preliminary comments on the report required by Condition 5a) of the Approval.</li> </ol>	<p>The study specified in Condition 5 a) has been undertaken and the report was submitted (transmittal letter /email sighted) to DAWE on 11 December 2020.</p> <p>The original EPBC Approval was issued on 12 June 2019. The Approval was varied by DAWE and reissued on 18 December 2020.</p> <p>The submission of the report to DAWE occurred within the 18-month timeframe specified in the Condition.</p> <p>DAWE provided comments on the report and requested the provision of significant further information and resubmission of the report for formal approval. At the time of this Independent Audit MRM had not finalised and submitted the report.</p> <p>The Auditor undertook a high-level review of the report and found the following:</p> <ul style="list-style-type: none"> <li>The capacity for attenuation of metals and acid within the groundwater system is described in Section 4.2.</li> <li>An estimate the available attenuation capacity and if, and when, this capacity will be exceeded is discussed in Sections 4.6 to 4.10.</li> <li>The groundwater system beneath NOEF is discussed in Section 3.2 which also discusses the TSF and mine pit.</li> <li>Geochemical modelling of metal concentrations, oxidation of sulphur and depletion of buffering capacity is discussed in Section 4.4.</li> <li>The assessment of management options to be implemented if the attenuation capacity is exceeded is presented in Section 4.12.</li> <li>The report does not include the mine pit and Tailings Storage Facility, although Section 3.2 of the Metal Attenuation Report provides a justification for focusing on only the NOEF.</li> </ul> <p>With regard to the final point above, DAWE did not, in their review, include reference to further consideration of the Open Pit and TSF domains. It is the Auditor’s view that the final version report should include consideration this TSF and Open Pit, unless the exclusion of this information is explicitly approved by DAWE.</p>	Complies

EPBC Approval Condition 5		To minimise impacts to EPBC Act listed species, by ensuring that acid and metalliferous drainage from the Northern Overburden Emplacement Facility, Tailings Storage Facility and mine pit does not present an unacceptable risk to the environment, the approval holder must submit the following completed studies to the Department for approval by the Minister: see 5 a) to 5 c) below. Upon approval by the Minister, the approval holder must implement any commitments made in an approved study and use the studies to inform the adaptive management plan required by condition 6. (The conclusions, recommendations and commitments in the study required by condition 5(c) must be included in a revised version of the adaptive management plan).				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
5 b)	<p>Within 18 months of this approval, a study to identify and characterise any hydraulic connection between the mine pit and the McArthur River. The study must assess how this connectivity could affect water quality in the McArthur River and include an assessment of potential management options to satisfy the requirements of condition 1, including how any material stored within the mine pit should be managed;</p>	<ul style="list-style-type: none"> <li>• Determine status of the study</li> <li>• Review Study Scope</li> <li>• Review evidence of submission of the report to DWE</li> </ul>	<p>McArthur River Mine, Report Open Pit – McArthur River Hydraulic Connections, Version 0, dated December 2020, prepared by Pando Australia Pty Ltd.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The study addressing condition 5a was provided to the Department on 11 December 2020. The study has not yet been approved by the Minister. Comments have been received by DAWE and MRM are currently working through them</p>	<ol style="list-style-type: none"> <li>1. MRM Pty Ltd McArthur River Mine – Report Open Pit – McArthur River Hydraulic Connections, prepared by Pando Australia (Pty Ltd), date December 2020.</li> <li>2. Letter from MRM (A Hatfield) to DAWE (<a href="mailto:audit@environment.gov.au">audit@environment.gov.au</a>) titled “McArthur River Mine – EPBC 2014/7210 Conditions 5a and 5b Reports.</li> <li>3. McArthur River Mine (EPBC 2014/7210 – Preliminary Comment on Plans, prepared by the DAWE. The document provides the Departments preliminary comments on the report required by Condition 5a) of the Approval.</li> </ol>	<p>The study specified in Condition 5 b) has been undertaken and the report was submitted (transmittal letter /email sighted) to DAWE on 11 December 2020.</p> <p>The original EPBC Approval was issued on 12 June 2019. The Approval was varied by DAWE and reissued on 18 December 2020.</p> <p>The submission of the report to DAWE occurred within the 18-month timeframe specified in the Condition.</p> <p>DAWE provided comments on the report and requested the provision of significant further information and resubmission of the report for formal approval. At the time of this Independent Audit MRM had not finalised and submitted the report.</p> <p>The Auditor undertook a high-level review of the report and found the following:</p> <ul style="list-style-type: none"> <li>• Hydraulic connections between the mine pit and the McArthur River are identified and characterised in Sections 3.3 and 3.4 of the report. The report concludes that there is no current movement of water from the pit to surface water and that this situation will continue throughout the operational phase of the mine while the pit is actively dewatered. It is noted that after mine closure that connectivity between the pit (lake) and surface water will occur.</li> <li>• Assesses how this connectivity could affect water quality in the McArthur River.</li> </ul> <p>The report concludes that as there is currently no flux of groundwater (within the pit) to surface water and that this situation is expected to be maintained throughout mining, that no impacts on surface water quality will occur during the period of mining operations and therefore additional actions are required to protect surface water and in particular the McArthur River.</p> <p>The report does not however identify potential impacts on surface water post mining or provide options to satisfy the requirements of Condition 1. It is noted that DAWE in their review noted that the proposed flow through scenario (connection of the pit lake to the McArthur River, MRM’s base case scenario, does not satisfy the requirements of the Condition 4 of the Approval. The study should therefore include characterisation of hydraulic links, impacts on surface waters and mitigation measures to be implemented post mining.</p>	<b>Non-Compliance</b>

EPBC Approval Condition 5		<p>To minimise impacts to EPBC Act listed species, by ensuring that acid and metalliferous drainage from the Northern Overburden Emplacement Facility, Tailings Storage Facility and mine pit does not present an unacceptable risk to the environment, the approval holder must submit the following completed studies to the Department for approval by the Minister: see 5 a) to 5 c) below.</p> <p>Upon approval by the Minister, the approval holder must implement any commitments made in an approved study and use the studies to inform the adaptive management plan required by condition 6. (The conclusions, recommendations and commitments in the study required by condition 5(c) must be included in a revised version of the adaptive management plan).</p>				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
5 c)	<p>Within 5 years of this approval, a study to determine the long-term (1000 years) stability and performance of the mine pit levee. This study must assess and confirm the stability of the structure in terms of resistance to erosion and must consider the effectiveness of the structure in isolating the mine pit from a 0.1% Annual Exceedance Probability (AEP) event. The study must consider the potential for climate change to increase the magnitude (including the depth of flooding and the velocity of flooding) of a 0.1% AEP event for the life of the project. If the study finds that the current levee may not be effective, the study must be extended to include an assessment of potential management options that could be implemented and identify a management option that will be effective in maintaining the stability and performance of the structure. The report of the study must commit the approval holder to implement the effective option.</p>	<ul style="list-style-type: none"> <li>Determine status of the study</li> </ul>	<p>Interview: (Senior Environmental Advisor, S Fleming) – This study is currently underway.</p>		<p>This condition has not yet been triggered (report due December 2025), however MRM has commenced the study.</p>	<p>Not Triggered</p>

EPBC Approval Condition 6		To minimise impacts to EPBC Act listed species, within 48 months of the date of this approval, the approval holder must submit an adaptive management plan to the Department for approval by the Minister. The adaptive management plan and its individual component plans must consider all available relevant data (including data from the studies required by condition 5). Upon written request from the Minister, the approval holder must provide the model files for any part of the adaptive management plan for review, either to the Minister or to a third party. The Minister may request revisions to the modelling. If such a revision is requested, the approval holder must revise the modelling and resubmit a report describing the new model run and the results to the Minister within a timeframe specified by the Minister in the written request. If modelling required under condition 6A(a) and 6A(b) shows impacts to water quality are greater than in modelling previously provided to the Minister, within three months of these results being obtained, the approval holder must revise and submit to the Minister for approval relevant plans including the surface water (condition 6B) and groundwater (condition 6C) monitoring and management plans and the adaptive management plan (condition 6) to include mitigation measures that will reduce impacts to levels that will ensure that site-specific guideline values described in condition 7 are not exceeded. The approved adaptive management plan must be implemented during all stages of the project, including care and maintenance. The adaptive management plan must include: see 6 A to 6 E below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
6	<p>Within 48 months of the date of this approval, the approval holder must submit an adaptive management plan to the Department for approval by the Minister. The adaptive management plan and its individual component plans must consider all available relevant data (including data from the studies required by condition 5).</p> <p>Upon written request from the Minister, the approval holder must provide the model files for any part of the adaptive management plan for review, either to the Minister or to a third party. The Minister may request revisions to the modelling. If such a revision is requested, the approval holder must revise the modelling and resubmit a report describing the new model run and the results to the Minister within a timeframe specified by the Minister in the written request. If modelling required under condition 6A(a) and 6A(b) shows impacts to water quality are greater than in modelling previously provided to the Minister, within three months of these results being obtained, the approval holder must revise and submit to the Minister for approval relevant plans including the surface water (condition 6B) and groundwater (condition 6C) monitoring and management plans and the adaptive management plan (condition 6) to include mitigation measures that will reduce impacts to levels that will ensure that site-specific guideline values described in condition 7 are not exceeded. The approved adaptive management plan must be implemented during all stages of the project, including care and maintenance.</p>	<ul style="list-style-type: none"> <li>Review correspondence evidencing submission of the management plan to DWE.</li> <li>Review correspondence / directions from DWE in relation to Adaptive Management Plan.</li> <li>Determine the status (preparation / review / timing) of the Adaptive Management Plan.</li> </ul>	<p>Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the Adaptive Management Plan as commenced.</p>		<p>This condition has not yet been triggered (the plan is due in 2024), however MRM report that they have commenced preparation of the plan.</p>	<p>Not Triggered</p>
6 A	<p>General requirements</p> <p>a. a new conceptual water model for the mine project area and surrounds and update the numerical groundwater, surface water quality and particle tracking models. The models must include all the geological, hydrogeological, geophysical and water quality information and data that has been acquired for, and is referred to in, the Environmental Impact Statement;</p> <p>b. an updated groundwater model, which assesses the impact of hydraulic loading on the groundwater system of the Northern Overburden Emplacement Facility (NOEF);</p> <p>c. reports describing the new and updated models described in condition 6A(a), and 6A(b) and results. The reports must be presented in a form that shows the new results and clearly explains the differences between the results of the updated modelling and the results of modelling presented in the Environmental Impact Statement, and the causes of this difference;</p> <p>d. procedures that ensure that monitoring data is responded to in a timely manner by triggering appropriate actions, responses and changes to planned management and mitigation (i.e. related to water quality objectives and early warning triggers);</p> <p>e. procedures that ensure that monitoring plans are regularly reviewed to consider the adequacy of the monitoring locations, frequencies and analytical suite to be measured, and these are improved in a timely manner;</p> <p>f. criteria for monitoring and evaluating the effectiveness of mitigation and management measures and a mechanism for reporting in a timely manner to the Minister when a current adaptive management approach is inadequate and how this will be rectified;</p> <p>g. a commitment to regularly review management options and contingencies (every 2 to 5 years during operations) taking into account recent advances in best practices.</p> <p>h. a commitment to achieve improved water quality and reduced toxicant levels in surface waters within 20 years after the cessation of mining for all monitoring sites for which site-specific guideline values have been developed in accordance with condition 6B(c) for toxicants where baseline levels are above default guideline values; and</p> <p>i. procedures that ensure that water monitoring data is collected for the life of the project including care and maintenance if the project enters this phase. All monitoring data must be provided to the Minister upon request.</p>	<ul style="list-style-type: none"> <li>Review contents of the Adaptive Management Plan against the requirements of this condition. Note that this review may include discussions / interviews with the authors of the plan.</li> <li>Review evidence of submission to DWE</li> </ul>	<p>Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the Adaptive Management Plan as commenced.</p>		<p>This condition has not yet been triggered (the plan is due in 2024), however MRM report that they have commenced preparation of the plan.</p>	<p>Not Triggered</p>

EPBC Approval Condition 6		To minimise impacts to EPBC Act listed species, within 48 months of the date of this approval, the approval holder must submit an adaptive management plan to the Department for approval by the Minister. The adaptive management plan and its individual component plans must consider all available relevant data (including data from the studies required by condition 5). Upon written request from the Minister, the approval holder must provide the model files for any part of the adaptive management plan for review, either to the Minister or to a third party. The Minister may request revisions to the modelling. If such a revision is requested, the approval holder must revise the modelling and resubmit a report describing the new model run and the results to the Minister within a timeframe specified by the Minister in the written request. If modelling required under condition 6A(a) and 6A(b) shows impacts to water quality are greater than in modelling previously provided to the Minister, within three months of these results being obtained, the approval holder must revise and submit to the Minister for approval relevant plans including the surface water (condition 6B) and groundwater (condition 6C) monitoring and management plans and the adaptive management plan (condition 6) to include mitigation measures that will reduce impacts to levels that will ensure that site-specific guideline values described in condition 7 are not exceeded. The approved adaptive management plan must be implemented during all stages of the project, including care and maintenance. The adaptive management plan must include: see 6 A to 6 E below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
6 B	<p>Surface water monitoring and management plan. This plan must:</p> <p>a. clearly identify (including on a map) all proposed water quality monitoring sites and flow gauging locations and, for each, justify the purpose/objective and monitoring frequency and timing. The plan must also specify and justify which sites are appropriate downstream monitoring sites (i.e. downstream of mine impacts) for derivation of site-specific guideline values. Water quality monitoring sites must include:</p> <p>i. locations on natural waterways (permanent, ephemeral/intermittent and pools);</p> <p>ii. locations within the mine water management system, including all water stores that can discharge (either controlled or uncontrolled) to the environment;</p> <p>iii. locations upstream of any possible mine influence that will be used as control sites;</p> <p>iv. a monitoring location that is upstream of the confluence of the McArthur River and the Glyde River (as locations below the confluence would be diluted by the Glyde River); and</p> <p>v. an additional compliance location, to be located on Emu Creek, that is to be established by 2025 (as at this location and soon after this time, groundwater modelling predicts that sulfate will migrate from the NOEF to the area).</p> <p>b. clearly identify and justify the proposed monitoring frequency, which must be sufficient to capture variability in the system, and locations of monitoring that will be undertaken for all stages of the project (including care and maintenance) and the analyte suite to be measured;</p> <p>c. specify site-specific guideline values for appropriate downstream monitoring sites identified in condition 6B(a). These guideline values must be calculated as specified in condition 7. Guideline values must include, but are not limited to, concentrations of sulfate, zinc, lead, cadmium, arsenic, cobalt, manganese, nickel and thallium. Default guideline values (as defined in ANZG 2018 or a future relevant ANZG) can be used until the studies required under condition 7 have been completed);</p> <p>d. specify early warning trigger values for water quality at appropriate monitoring sites identified in condition 6B(a). These early warning trigger values must allow early identification of when water or sediment quality could be impacted. Early warning trigger values must include, but are not limited to, concentrations of sulfate, zinc, lead, cadmium, arsenic, cobalt, manganese, nickel and thallium;</p> <p>e. include a process for reviewing the data collected (at least every three months during operations including one review at the end of the dry season and one review at the end of the wet season and annually during closure), examining trends in water quality and comparing monitoring data with relevant modelling predictions at all monitoring sites required under condition 6B(a). The plan must detail for each monitoring site a robust statistical method for determining whether observations show a statistically significant difference from predictions. The plan must provide for the method to be applied to all data collected at each monitoring site. If the application of this method shows a statistically significant difference, this must be reported to the Minister in accordance with the timeframes required under Part B - condition 8 and a review of the modelling must be undertaken;</p> <p>f. include a trigger action response plan that clearly identifies timeframes and contingencies to be implemented for exceedance for both the site-specific guideline values required under condition 6B(c) or the early warning trigger values under condition 6B(d). The trigger action response plan must also include commitment(s) to implement contingencies in the event that the available capacity of attenuation of metals and acid within the groundwater system, as determined by the study required under condition 5(a), is exceeded;</p> <p>g. include baseline levels of sulfate, zinc, lead, cadmium, arsenic, cobalt, manganese, nickel and thallium at appropriate sites identified in condition 6B(a) and justify these levels based on existing or, if data are not available, specify a process for collecting suitable data and defining baseline levels.</p>	<ul style="list-style-type: none"> <li>Determine the status (preparation / review / timing) of the Surface Water Monitoring and Management Plan.</li> <li>Review contents of the Plan against the requirements of this condition. Note that this review may include discussions / interviews with the authors of the plan.</li> <li>Review evidence of submission to DWE</li> </ul>	<p>Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the Adaptive Management Plan as commenced.</p> <p>Audit Inspection – the Auditor inspected surface water monitoring sites upstream, within the McArthur River diversion channel and downstream of the site. Photographs 5 and 6 show examples of a sampling point location marker and a flow gauging station.</p>		<p>This condition has not yet been triggered (the plan is due in 2024), however MRM report that they have commenced preparation of the plan.</p>	<p>Not Triggered</p>



EPBC Approval Condition 6		To minimise impacts to EPBC Act listed species, within 48 months of the date of this approval, the approval holder must submit an adaptive management plan to the Department for approval by the Minister. The adaptive management plan and its individual component plans must consider all available relevant data (including data from the studies required by condition 5). Upon written request from the Minister, the approval holder must provide the model files for any part of the adaptive management plan for review, either to the Minister or to a third party. The Minister may request revisions to the modelling. If such a revision is requested, the approval holder must revise the modelling and resubmit a report describing the new model run and the results to the Minister within a timeframe specified by the Minister in the written request. If modelling required under condition 6A(a) and 6A(b) shows impacts to water quality are greater than in modelling previously provided to the Minister, within three months of these results being obtained, the approval holder must revise and submit to the Minister for approval relevant plans including the surface water (condition 6B) and groundwater (condition 6C) monitoring and management plans and the adaptive management plan (condition 6) to include mitigation measures that will reduce impacts to levels that will ensure that site-specific guideline values described in condition 7 are not exceeded. The approved adaptive management plan must be implemented during all stages of the project, including care and maintenance. The adaptive management plan must include: see 6 A to 6 E below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
6 C	<p>Groundwater monitoring and management plan. This plan must:</p> <p>a. clearly identify all monitoring sites (including on a map) and, for each, justify the purpose/objective and the frequency and timing of monitoring. This must include control sites at locations upstream of any possible mine influence;</p> <p>b. clearly identify the proposed timing and frequency of sampling, what monitoring is applicable to all stages of the project (including care and maintenance) and the analyte suite;</p> <p>c. designate some of the monitoring sites identified in condition 6C(a) as appropriate sites for derivation of site-specific guideline values and justify this selection. The plan must specify site-specific guideline values for all of these appropriate monitoring sites. These guideline values must be calculated as specified in condition 7. Guideline values must include, but are not limited to, concentrations of sulfate, zinc, lead, cadmium, arsenic, cobalt, manganese, nickel and thallium. Default guideline values (as defined in ANZG 2018 or the subsequent currently official Australian Guideline for Fresh and Marine Water Quality) can be used until the studies required under condition 7 have been completed;</p> <p>d. specify site specific early warning trigger values for water quality at appropriate monitoring sites as required under condition 6C(c). These early warning trigger values must allow early identification of when water quality could be impacted. Early warning trigger values must include but are not limited to concentrations for sulfate, zinc, lead, cadmium, arsenic, cobalt, manganese, nickel and thallium;</p> <p>e. include a process for reviewing the data collected (at least six-monthly during operations including one review at the end of the dry season and one review at the end of the wet season and annually during closure), examining trends in water quality and comparing monitored data with relevant modelling predictions at all monitoring locations. The plan must detail for each monitoring site a robust statistical method for determining whether observations show a statistically significant difference to predictions. The plan must provide for the method to be applied to all data collected from each monitoring site, If the application of this method shows a statistically significant difference, this must be reported to the Minister in accordance with the timeframes required under Part B condition 8 and a review of the modelling must be undertaken;</p> <p>f. include a trigger action response plan with clearly identified timeframes and contingencies to be implemented for exceedances of either the site-specific guideline values in condition 6C(c) or the early warning trigger values in condition 6C(d);</p> <p>g. include locations for additional paired monitoring bores located to the southwest of Barramundi Dreaming and a paired monitoring bore with an associated surface water monitoring location on Emu Creek north of Barramundi Dreaming. Potential impacts arising from hydraulic loading and other groundwater flow changes, including surface and groundwater quality changes, from the Northern Overburden Emplacement Facility must be monitored. These monitoring sites are additional to the monitoring sites required by condition 6C(a); and</p> <p>h. include a definition of baseline water quality that includes concentrations of sulfate, zinc, lead, cadmium, arsenic, cobalt, manganese, nickel and thallium at appropriate sites identified in condition 6C(a). These concentrations must be justified based on existing data. If data are not available, the plan must specify a process for collecting suitable data and defining baseline water quality within 12 months.</p>	<ul style="list-style-type: none"> <li>Determine the status (preparation / review / timing) of the Groundwater Monitoring and Management Plan.</li> <li>Review contents of the Plan against the requirements of this condition. Note that this review may include discussions / interviews with the authors of the plan.</li> <li>Review evidence of submission to DWE.</li> <li>Review of correspondence with DWE in relation to the Groundwater Management Plan</li> </ul>	<p>Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the Adaptive Management Plan as commenced.</p> <p>Audit Inspection – the Auditor inspected groundwater monitoring bores that are relevant to this Condition.</p>		<p>This condition has not yet been triggered (the plan is due in 2024), however MRM report that they have commenced preparation of the plan.</p>	<p>Not Triggered</p>

EPBC Approval Condition 6		To minimise impacts to EPBC Act listed species, within 48 months of the date of this approval, the approval holder must submit an adaptive management plan to the Department for approval by the Minister. The adaptive management plan and its individual component plans must consider all available relevant data (including data from the studies required by condition 5). Upon written request from the Minister, the approval holder must provide the model files for any part of the adaptive management plan for review, either to the Minister or to a third party. The Minister may request revisions to the modelling. If such a revision is requested, the approval holder must revise the modelling and resubmit a report describing the new model run and the results to the Minister within a timeframe specified by the Minister in the written request. If modelling required under condition 6A(a) and 6A(b) shows impacts to water quality are greater than in modelling previously provided to the Minister, within three months of these results being obtained, the approval holder must revise and submit to the Minister for approval relevant plans including the surface water (condition 6B) and groundwater (condition 6C) monitoring and management plans and the adaptive management plan (condition 6) to include mitigation measures that will reduce impacts to levels that will ensure that site-specific guideline values described in condition 7 are not exceeded. The approved adaptive management plan must be implemented during all stages of the project, including care and maintenance. The adaptive management plan must include: see 6 A to 6 E below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
6 D	<p>Sediment monitoring and management plan. This plan must:</p> <p>a. clearly identify (including on a map) all monitoring sites and, for each, justify the objective/purpose and the frequency and timing of monitoring. This must include:</p> <p>i. control sites at locations upstream of any possible mine influence;</p> <p>ii. monitoring sites in areas where elevated lead and zinc levels have already been identified; and</p> <p>iii. monitoring sites in soils and sediments around the Tailings Storage Facility, the Northern Overburden Emplacement Facility, the mine pit and within surface water features including the McArthur River and its diversion, Surprise Creek, Barney Creek and its diversion and Emu Creek.</p> <p>b. clearly specify the frequency and timing of sampling for all stages of the project (including care and maintenance) and the analyte suite;</p> <p>c. include site-specific guideline values for appropriate monitoring sites identified as required under condition 6D(a). These values must be calculated as required in condition 7. Guideline values must include, but are not limited to, concentrations of sulfate, zinc, lead, cadmium, arsenic, cobalt, manganese, nickel and thallium. Interim values can be used until the studies required under condition 7 have been completed;</p> <p>d. include a process for reviewing the data collected, examining trends in water quality and comparing monitored data with relevant modelling predictions at all monitoring sites identified as required under condition 6D(a). A statistically robust criteria for determining if observations are significantly different to predictions must be determined for each monitoring site. If any of these criteria are exceeded this must be reported to the Minister in accordance with the timeframes specified in Part B condition 8 and a review of the modelling undertaken;</p> <p>e. include a trigger action response plan with clearly identified timeframes and contingencies to be implemented for exceedances of either the site-specific guideline values required under condition 6D(c) or the early warning trigger values required under condition 6D(d); and</p> <p>f. include a plan for monitoring and managing the impacts of lead rich dust on the Gouldian Finch. The plan must include a commitment to monitor the composition and density of key food grasses for the Gouldian Finch in the project footprint and manage the impacts of lead and zinc on foraging habitat and nesting habitat for the Gouldian Finch.</p>	<ul style="list-style-type: none"> <li>Determine the status (preparation / review / timing) of the sediment Monitoring and Management Plan.</li> <li>Review contents of the Plan against the requirements of this condition. Note that this review may include discussions / interviews with the authors of the plan.</li> <li>Review evidence of submission to DWE.</li> <li>Review of correspondence with DWE in relation to the Management Plan</li> </ul>	<p>Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the Adaptive Management Plan as commenced.</p>		<p>This condition has not yet been triggered (the plan is due in 2024), however MRM report that they have commenced preparation of the plan.</p>	<p>Not Triggered</p>
6 E	<p>A synthesis of all environmental monitoring and management plans required under conditions 6B, 6C and 6D that describes the interconnections between these plans. This synthesis must identify:</p> <p>a. how all monitoring data collected under the various environmental monitoring and management plans will be considered in order to assess the effectiveness of the mitigation, management and contingency measures; and</p> <p>b. how all monitoring data collected under the various environmental monitoring and management plans will be integrated to identify trends in water quality and inform the adaptive management plan in condition 6.</p>	<ul style="list-style-type: none"> <li>Review contents of the Adaptive Management Plan and subplans against the requirements of this condition.</li> </ul>	<p>Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the Adaptive Management Plan as commenced.</p> <p>Audit Inspection – the Auditor inspected groundwater monitoring bores that are relevant to this Condition.</p>		<p>This condition has not yet been triggered (the plan is due in 2024), however MRM report that they have commenced preparation of the plan.</p>	<p>Not Triggered</p>

EPBC Approval Condition 7		To minimise impacts to EPBC Act listed species, the site-specific guideline values required under conditions 6B, 6C and 6D must be developed in accordance with ANZG (2018) (or the subsequent currently official Australian Guideline for Fresh and Marine Water Quality) by a suitably qualified person. Guideline values must: refer to 7A to 7B below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
7	To minimise impacts to EPBC Act listed species, the site-specific guideline values required under conditions 6B, 6C and 6D must be developed in accordance with ANZG (2018) (or the subsequent currently official Australian Guideline for Fresh and Marine Water Quality) by a suitably qualified person.	<ul style="list-style-type: none"> <li>Review the qualifications and experience of the author(s) of the site-specific guidelines.</li> <li>Discussion / interview with authors re application OF ANZG (2018).</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – The preparation of this report has commenced.		This condition has not yet been triggered (report due in 2023), however MRM have commenced preparation of the report.	Not Triggered
7 A	<p>Guideline values must:</p> <p>a. include values for the following toxicants and physico-chemical parameters as a minimum:</p> <p>i. Toxicants: for all surface water, ground water and sediment monitoring sites: sulfate, zinc, lead, cadmium, arsenic, cobalt, manganese, nickel and thallium.</p> <p>ii. Physico-chemical parameters: For all surface water, ground water and sediment monitoring sites: pH and electrical conductivity. Where relevant, values should also be adjusted for water hardness, measured as milliequivalents per litre</p> <p>b. include parameters capable of detecting potential threats to terrestrial and aquatic species, determined from a food web of the terrestrial and aquatic areas that are relevant to EPBC Act listed species. This food web must inform the likely bioaccumulation rates and risks of metals to EPBC Act listed species; and</p> <p>c. be developed to address possible risks to EPBC Act listed species, including the Gouldian Finch and the Largetooth Sawfish.</p>				This condition has not yet been triggered (report due in 2024)	Not Triggered
7 B	<p>The approval holder must:</p> <p>a. ensure that 95% of samples of water and sediment quality do not exceed site specific guideline values at monitoring sites determined in accordance with conditions 6B, 6C and 6D; and</p> <p>b. ensure that 95% of sediment samples (measured in accordance with condition 6D) do not exceed site-specific guideline values at monitoring sites that address mine-related impacts for the following metals: sulfate, zinc, lead, cadmium, arsenic, cobalt, manganese, nickel and thallium within four years of the date of approval and at all monitoring events for the life of the project thereafter. The site-specific guideline values for sediments must be developed from a source approved by the Minister.</p>				This condition has not yet been triggered (report due in 2024)	Not Triggered

EPBC Approval Condition 8		To minimise impacts to EPBC Act listed species, within 12 months of the date of approval the approval holder must develop and implement standard operating procedures for the collection and processing of all surface water, groundwater, soil, and sediment samples required under conditions 6B, 6C and 6D. The standard operating procedures must: refer to 8 a. to 8 d. below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
8 a.	Prescribe all collection, handling and sample processing steps to be undertaken prior to samples being delivered to a suitable qualified laboratory for analysis. This includes explicit instructions for cleaning of sampling and processing equipment;	<ul style="list-style-type: none"> <li>Review plans, procedures, work instructions related to all environmental sampling.</li> <li>Review Sampling and testing records to confirm compliance with these requirements.</li> </ul>		<ol style="list-style-type: none"> <li>Natural Surface Water Procedure PRO-2200023</li> <li>Groundwater Monitoring Procedure PRO-2200024</li> <li>Artificial Surface Water Site Monitoring Procedure PRO-2200025</li> <li>Fluvial Sediment Monitoring Procedure PRO-2200029</li> <li>Soil Monitoring Procedure PRO-2200037.</li> </ol>	All five draft SOPs reviewed instructions for: <ul style="list-style-type: none"> <li>Sample collection, handling and sample processing steps; and</li> <li>cleaning of sampling and processing equipment.</li> </ul>	<b>Complies</b>
8 b.	prescribe quality assurance and quality control procedures in the field and laboratory. This must include, but is not limited to, collection and analysis of field and laboratory duplicate and blank samples;	<ul style="list-style-type: none"> <li>Review QA/QC program, procedures and protocols.</li> <li>Review Sampling and testing records to confirm compliance with these requirements.</li> </ul>		<ol style="list-style-type: none"> <li>Natural Surface Water Procedure PRO-2200023</li> <li>Groundwater Monitoring Procedure PRO-2200024</li> <li>Artificial Surface Water Site Monitoring Procedure PRO-2200025</li> <li>Fluvial Sediment Monitoring Procedure PRO-2200029</li> <li>Soil Monitoring Procedure PRO-2200037.</li> </ol>	All five draft SOPs reviewed described quality assurance and quality control procedures in the field and laboratory, including collection and analysis of field and laboratory duplicate and blank samples.	<b>Complies</b>
8 c.	Include a program for reviewing the standard operating procedures. This will include regular auditing, quality control and quality assurance procedures to ensure that the standard operating procedures are being correctly implemented and are effective; and	<ul style="list-style-type: none"> <li>Review all plans, programs, monitoring and testing procedures in relation to QA/QC, auditing and verification.</li> <li>Review Sampling and testing records to confirm compliance with these requirements.</li> </ul>		<ol style="list-style-type: none"> <li>Natural Surface Water Procedure PRO-2200023</li> <li>Groundwater Monitoring Procedure PRO-2200024</li> <li>Artificial Surface Water Site Monitoring Procedure PRO-2200025</li> <li>Fluvial Sediment Monitoring Procedure PRO-2200029</li> <li>Soil Monitoring Procedure PRO-2200037.</li> </ol>	All five draft SOPs reviewed instructions for the regular review of the SOPs.	<b>Complies</b>
8 d.	Be submitted to the Minister for approval at least three months prior to the proposed date of commencement of surface water, groundwater and sediment sampling required under conditions 6B, 6C and 6D.	<ul style="list-style-type: none"> <li>Review records of submission of sampling, monitoring and testing programs, including QA/QC to DWE.</li> <li>Review approval correspondence from DWE.</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – The SOPs are not required to be submitted until 3 months prior to the proposed date of commencement in the Adaptive Management Plan (AMP), which is not required to be submitted until 12 June 2023.		Compliance with this condition does not fall within the audit period.	<b>Not Triggered</b>

EPBC Approval Condition 9		If the Minister concludes from the results of the study required by Condition 5a that buffering capacity of the groundwater system is insufficient to enable the approval holder to meet the outcomes of condition 1, the approval holder must submit a plan for approval by the Minister the implementation of which will prevent any increase in water contamination by metals in the McArthur River arising from the project. If the Minister or the approval holder determines that sufficient mitigation is not possible then the approval holder must submit within 2 years a plan that will ensure that the outcomes of condition 1 are met by the approval holder. The approved plan must be implemented.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
9	If the Minister concludes from the results of the study required by Condition 5a that buffering capacity of the groundwater system is insufficient to enable the approval holder to meet the outcomes of condition 1, the approval holder must submit a plan for approval by the Minister the implementation of which will prevent any increase in water contamination by metals in the McArthur River arising from the project. If the Minister or the approval holder determines that sufficient mitigation is not possible then the approval holder must submit within 2 years a plan that will ensure that the outcomes of condition 1 are met by the approval holder. The approved plan must be implemented.	<ul style="list-style-type: none"> <li>Review correspondence / directions from the Minister regarding Condition 5a.</li> <li>If triggered – review status of mitigation plan</li> <li>If triggered – verify submission of plan and approval by DWE.</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – The study addressing condition 5a was provided to the DAWE on 11 December 2020. DAWE has not provided any feedback on the study.		DAWE has not provided any specific feedback to MRM in relation to this study.	<b>Not Triggered</b>

EPBC Approval Condition 10		To minimise impacts to EPBC Act listed species, by ensuring protection of the environment from potential contamination and failure of the proposed Northern Overburden Emplacement Facility the approval holder must: Refer to 10 a. to 10 c. below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
10 a.	within 4 years of the date of this approval, develop a geotechnical plan for the Northern Overburden Emplacement Facility. The plan must include measures to limit erosion (including cavitation), supported by erosion modelling. The plan must be written by a geotechnical engineer. The plan must be completed to the satisfaction of the Department and submitted to the Department for the agreement of the Minister. The approval holder must not change the structure of the Northern Overburden Emplacement Facility unless a revised version of the geotechnical plan for the Northern Overburden Emplacement Facility that addresses the proposed change is approved by the Minister. The approved plan must be implemented;	<ul style="list-style-type: none"> <li>Determine the status of this development of the Geotechnical Plan for the northern overburden emplacement facility.</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the Geotechnical Plan has commenced.		This condition has not yet been triggered (the plan is due by 12 June 2023), however MRM report that preparation of the plan underway.	Not Triggered
10 b.	within 3 years of the date of this approval, develop a geosynthetic liner testing plan. The plan must be developed by an expert with at least 5 years' relevant experience. The plan must be independently reviewed by the independent review committee established under condition 16. The plan must be submitted to the Department for approval by the Minister within 3 years of the date of the approval. The plan must outline a process to test the effectiveness of geosynthetic liner cover options for the Northern Overburden Emplacement Facility, including a geosynthetic liner /compacted clay layer combination. The testing must be designed to demonstrate the performance of the geosynthetic liner over the long term (1000 years). This must include accelerated aging testing. Testing must also be performed on rehabilitated areas of the Northern Overburden Emplacement Facility. All relevant performance parameters must be monitored, including: <ul style="list-style-type: none"> <li>i. slope stability during extreme events;</li> <li>ii. cover performance as a result of heat effects;</li> <li>iii. cover performance if erosion exposes the liner at the surface, including the effects of (acidic tropical) rainfall and sunlight;</li> <li>iv. effects of plant, including tree, roots on the integrity of the cover;</li> <li>v. resistance of the cover to burrowing animals;</li> <li>vi. tolerance of the geosynthetic liner to expected differential settlement;</li> <li>vii. veracity of cover longevity predictions;</li> <li>viii. likely long-term maintenance requirements; and</li> <li>ix. tolerance of the geosynthetic liner for the chemistry of water to which it may be exposed. This must include acidic leachate from unneutralised acidic drainage.</li> </ul> The approved plan must be implemented within 5 years of the date of this approval. The approval holder must report results of all tests and monitoring to the Minister every three years and to the independent review committee described in condition 16.	<ul style="list-style-type: none"> <li>Review the qualification and experience of the author of the liner testing plan.</li> <li>Review the liner testing plan against the requirements of this condition</li> <li>Review correspondence from independent reviewer confirming review of eth plan.</li> <li>Review correspondence evidencing submission of the plan to DWE.</li> <li>Review correspondence from DWE approving the plan.</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the geosynthetic liner testing program has commenced.		This condition has not yet been triggered (the plan is due by 12 June 2022), however MRM report that preparation of the plan underway. The Auditor notes that the latest modification to the EPBC Approval (approved on 29 April 2022) extends this date to 12 June 2023.	Not Triggered
10 c.	c. If requested by the Department, develop a plan which details what other mitigation measures can be implemented if the geosynthetic liner option for the Northern Overburden Emplacement Facility proves unsuccessful. The plan must be submitted to the Minister for approval within one year of the date of this request. The approved plan must be implemented. <ul style="list-style-type: none"> <li>i. If other mitigation measures are not demonstrated to be effective to the satisfaction of the Minister, then the</li> </ul>	<p>If the Department has requested the development of a further mitigation plan:</p> <ul style="list-style-type: none"> <li>Determine the status of the preparation of the plan</li> <li>Review the plan against the requirements of this condition</li> <li>Review correspondence evidencing submission of the plan to DWE.</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – No requests were received from DAWE for additional plans or mitigation measures during the audit period.		No requests were received from DAWE for additional plans or mitigation measures during the audit period.	Not Triggered

<p>approval holder must submit a variation to its current mining management plan that allows all mine derived wastes to be stored in the mine pit within 6 months of the geosynthetic liner option being proven to be unsuccessful. The varied approved plan must be implemented.</p> <p>ii. The approval holder must not store mine derived wastes in the mine pit unless the Minister has approved new surface water and ground water models not based on rapid filling of the pit lake and ground water level recovery.</p>	<ul style="list-style-type: none"> <li>Review mine waste disposal plan (re: the disposal location and processes for mine wastes) / inspect mine waste disposal activities on-site.</li> <li>If mine wastes are to be disposed of into the pit – verify that DWE has approved that disposal in writing.</li> </ul>				
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EPBC Approval Condition 11		To minimise impacts to EPBC Act listed species, in areas where the Northern Overburden Emplacement Facility is to be expanded as part of this action the basal layer of the Northern Overburden Emplacement Facility foundation must be constructed with a maximum saturated hydraulic conductivity of $10^{-9}$ metres per second to limit seepage to groundwater.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
11	<p>To minimise impacts to EPBC Act listed species, in areas where the Northern Overburden Emplacement Facility is to be expanded as part of this action the basal layer of the Northern Overburden Emplacement Facility foundation must be constructed with a maximum saturated hydraulic conductivity of <math>10^{-9}</math> metres per second to limit seepage to groundwater.</p>	<ul style="list-style-type: none"> <li>In-situ permeability testing</li> </ul>	<p>Interview: (Principal Project Engineer, J Hacker) – the basal layer consists of clay that is excavated from the footprint of the expansion area, blended, stockpiled then placed and compacted to a minimum of 0.5 metre thickness. The clay we are recovering is very good quality and we are achieved better than the required hydraulic conductivity of <math>10^{-9}</math> m/s.</p> <p>Audit Inspection – the civil works associated with the expansion of the northern end of the NOEF was inspected during this audit. Activities witnessed included:</p> <ul style="list-style-type: none"> <li>Excavation of clay from the NOEF expansion area</li> <li>Clay blending and stockpiling</li> <li>Placement and compacting of clay basal layer.</li> </ul> <p>Refer to Photograph 7 that shows the NOEF expansion area at the northern end of the NOEF. The placement of the basal layer is the darker clay placed at the at the centre left of the cleared area.</p>	<ol style="list-style-type: none"> <li>Inspection and Test Plan Records (North East Alpha, In-Situ CCL Construction): <ul style="list-style-type: none"> <li>August 2021</li> <li>September 2021</li> <li>November 2021</li> <li>December 2021</li> </ul> <p>These records evidence the inspection and signoff by MRM site engineers for each step NOEF cell construction including basal layer installation and testing.</p> </li> <li>The Auditor reviewed a sample (6) of Permeability Certificates prepared by Trilab relating to clay testing for the basal layer construction, including: <ul style="list-style-type: none"> <li>20/12/21 – North East Alpha Silty Clay Permeability <math>6.5 \times 10^{-12}</math> m/s</li> <li>17/12/21 – North East Alpha Clay Permeability <math>4.8 \times 10^{-11}</math> m/s</li> <li>16/12/21 – North East Alpha Clay Permeability <math>5.0 \times 10^{-12}</math> m/s</li> </ul> </li> <li>The Auditor reviewed a sample (12) of Permeability Certificates prepared by Trilab relating to clay testing for the NOEF Levee construction, including: <ul style="list-style-type: none"> <li>20/9/21 – North East Alpha Silty Clay Permeability <math>1.3 \times 10^{-11}</math> m/s</li> <li>12/08/21 – North East Alpha Silty Clay Permeability <math>4.8 \times 10^{-12}</math> m/s</li> <li>23/8/21 – North East Alpha Clay Permeability <math>2.1 \times 10^{-11}</math> m/s</li> </ul> </li> </ol>	<p>The supervising engineer responsible for the construction of the NOEF extension area, including the installation of the basal layer provided a guided inspection of the construction works, sourcing of clay materials, installation and in-situ testing of the basal layer.</p> <p>A comprehensive inspection and testing program of all elements of the cell construction is being implemented and documented.</p> <p>The subsequent review of permeability testing records verified that the permeability of the clay basal layer being installed is less than <math>10^{-9}</math> m/s.</p>	<p><b>Complies</b></p>

EPBC Approval Condition 12		Within 12 months of the date of the approval the approval holder must submit to the Minister a report that includes: refer to 12 a. to 12 e. below. The reviewed report, following approval by the Minister, must be used to inform the adaptive management plan required by condition 6 and the geotechnical plan for the Northern Overburden Emplacement Facility required by condition 10.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
12 a.	the results of further detailed design studies for the groundwater interception scheme to be implemented adjacent the Northern Overburden Emplacement Facility;	<ul style="list-style-type: none"> <li>Review correspondence evidencing submission of report to the Minister</li> <li>Review contents of report against the requirements of this Condition.</li> </ul>	<p>Documentation as provided by MRM.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The report addressing Condition 12 was provided to DAWE on 12 June 2020. The report has not yet been approved, and DAWE has not put forward a position regarding the interception scheme.</p> <p>MRM is currently working through comments from DAWE on this report. The comments were received outside of the audit period.</p>	<ol style="list-style-type: none"> <li>NOEF Interception Scheme Report EPBC Condition 12, dated 12 June 2020.</li> <li>Email from MRM (C Bell) to DAWE (<a href="mailto:audit@environment.gov.au">audit@environment.gov.au</a>) titled “McArthur River Mining Pty Ltd   EPBC 2014/7210 Submission” dated 12 June 2020.</li> <li>Letter from MRM (A Hatfield) to DAWE (<a href="mailto:audit@environment.gov.au">audit@environment.gov.au</a>) titled “McArthur River Open Cut Mine Project – EPBC 2014/7210 Condition 12 Report” dated 12 June 2020.</li> <li>Letter from Pando Australia (T Hodgkin) to MRM (C Bell) titled “NOEF Interception Scheme – EPBC Condition 12 Report”, dated 9 June 2020.</li> </ol>	<p>The further design study report for the NOEF groundwater interception scheme has been prepared and was submitted to DAWE on 12 June 2020.</p> <p>The original EPBC Approval was issued on 12 June 2019. The submission of the report to DAWE occurred within the 12-month timeframe specified in the Condition.</p> <p>The report was reviewed by Pando Australia (an independent engineering consultancy).</p> <p>Section 3 of the report details the further field investigations and updated conceptual modelling undertaken.</p>	Complies
12 b.	the results of further studies undertaken to characterise any preferential flow paths that may exist in the geological formations through which contaminated water is modelled to flow that contain dolomite rock, including an analysis of how any flow paths could reduce the effectiveness of the interception scheme;	<ul style="list-style-type: none"> <li>Review contents of report against the requirements of this Condition.</li> </ul>		<ol style="list-style-type: none"> <li>McArthur River Mine Northern Overburden Emplacement Facility Hydrogeology Review, Final Report”, prepared by Klohn, Crippen Berger, dated May 2020.</li> <li>Email from MRM (C Bell) to DAWE (<a href="mailto:audit@environment.gov.au">audit@environment.gov.au</a>) titled “McArthur River Mining Pty Ltd   EPBC 2014/7210 Submission” dated 12 June 2020.</li> <li>Letter from MRM (A Hatfield) to DAWE (<a href="mailto:audit@environment.gov.au">audit@environment.gov.au</a>) titled “McArthur River Open Cut Mine Project – EPBC 2014/7210 Condition 12 Report” dated 12 June 2020.</li> <li>Letter from Pando Australia (T Hodgkin) to MRM (C Bell) titled “NOEF Interception Scheme – EPBC Condition 12 Report”, dated 9 June 2020.</li> </ol>	<p>The further study to characterise the hydrogeology related to the NOEF has been prepared and was submitted to DAWE on 12 June 2020.</p> <p>The original EPBC Approval was issued on 12 June 2019. The submission of the report to DAWE occurred within the 12-month timeframe specified in the Condition.</p> <p>The report was reviewed by Pando Australia (an independent engineering consultancy).</p> <p>Section 3.2.2 of the report describes the findings in relation to preferential flow paths.</p>	
12 c.	the components of the proposed interception scheme and a plan for implementing the scheme within 2 years of the date of the approval;	<ul style="list-style-type: none"> <li>Review contents of report against the requirements of this Condition.</li> </ul>		<ol style="list-style-type: none"> <li>NOEF Interception Scheme Report EPBC Condition 12, dated 12 June 2020.</li> </ol>	<p>The conclusion of the report details that the implementation of additional management measures such as an interception trench would be ineffective at this time due to the lack of connection between groundwater NOEF seepage and the invert of Barney Creek as, the groundwater levels would be below the base of the interception trench and therefore it would be ineffective. Therefore, an interception scheme has not been proposed at this time.</p>	Not Triggered
12 d.	a detailed plan for the operation and monitoring of the interception scheme for the life of the project including during any care and maintenance. This plan must clearly detail how monitoring will demonstrate effectiveness of the interception scheme; and	<ul style="list-style-type: none"> <li>Review contents of report against the requirements of this Condition.</li> </ul>		<ol style="list-style-type: none"> <li>NOEF Interception Scheme Report EPBC Condition 12, dated 12 June 2020.</li> </ol>	<p>The conclusion of the report details that the implementation of additional management measures such as an interception trench would be ineffective at this time due to the lack of connection between groundwater NOEF seepage and the invert of Barney Creek as, the groundwater levels would be below the base of the interception trench and therefore it would be ineffective. Therefore, an interception scheme has not been proposed at this time.</p>	
12 e.	the predicted improvements to water quality expected as a result of implementing the interception scheme.	<ul style="list-style-type: none"> <li>Review contents of report against the requirements of this Condition.</li> </ul>		<ol style="list-style-type: none"> <li>NOEF Interception Scheme Report EPBC Condition 12, dated 12 June 2020.</li> </ol>	<p>The NOEF Interception Scheme Report includes an assessment of the predicted impacts of implementation of the groundwater interception scheme and concludes that the scheme would not result in an improvement to groundwater quality.</p>	Complies

EPBC Approval Condition 13		Within five years of the date of the approval the approval holder must submit a management plan for the management of the Tailings Storage Facility after mining ceases to the Department for approval by the Minister. This plan must include: refer to 13 a. to 13 c. below. The approved management plan must be implemented.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
13 a.	<b>This plan must include:</b> a commitment to reprocess all material within the Tailings Storage Facility within 15 years of the end of mining;	<ul style="list-style-type: none"> <li>Review correspondence evidencing submission of management plan to the Minister</li> <li>Review approval correspondence from the Minister</li> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the TSF Management Plan as commenced.		This condition has not yet been triggered (the plan is due in 2024), however MRM report that they have commenced preparation of the plan.	Not Triggered
13 b.	a commitment to undertake geochemical analysis of the material (including bore water) within 50 m of the Tailings Storage Facility footprint. The plan will determine disposal options for contaminated materials commensurate with the type and level of contamination, including disposal within the mine pit; and	<ul style="list-style-type: none"> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the TSF Management Plan as commenced.		This condition has not yet been triggered (the plan is due in 2024), however MRM report that they have commenced preparation of the plan.	Not Triggered
13 c.	a program for geochemical analysis of the reprocessed waste material to identify the level and type of contamination that would likely impact on meeting the requirements of condition 1(b). The plan must include, but may not be limited to, the option of encapsulating waste material before deposition within the mine pit.	<ul style="list-style-type: none"> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – The preparation of the TSF Management Plan as commenced.		This condition has not yet been triggered (the plan is due in 2024), however MRM report that they have commenced preparation of the plan.	Not Triggered



EPBC Approval Condition 14		Within 24 months of the date of the approval the approval holder must submit an aquatic ecology monitoring and management plan to the Department for approval by the Minister. The plan must: refer to 14 a. to 14 h. below. The approved management plan must be implemented.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
14 a.	<p><b>The plan must:</b></p> <p>clearly identify the locations of all monitoring sites (including providing a map) and for each monitoring site specify the frequency, timing and types of monitoring that will be undertaken and its purpose/objectives. This must include control sites at locations upstream of any possible mine influence;</p>	<ul style="list-style-type: none"> <li>Review correspondence evidencing submission of management plan to the Minister</li> <li>Review approval correspondence from the Minister</li> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	<p>Aquatic Ecology Management Plan EPBC Approval 2014/7210, Revision 0, dated February 2020.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The Aquatic Ecology Management Plan (AEMP) was submitted to the Department on 12 June 2021. It is understood that the Department is now reviewing the AEMP.</p>	<ol style="list-style-type: none"> <li>Aquatic Ecology Management Plan EPBC Act Approval 2014/7210, Revision 0, dated 12 June 2021.</li> <li>Aquatic Ecology Management Plan Appendix A - McArthur River Mining, Freshwater Sawfish Monitoring Plan to address conditions of EPBC approval 2014/7210, Revision 0, prepared by Indopacific Environmental, dated 9 June 2021.</li> <li>Aquatic Ecology Management Plan Appendix B - Surface Water Quality Monitoring Program.</li> <li>Aquatic Ecology Management Plan Appendix c - Waterways modelling of drawdown impacts on refuge ponds, Extent and duration of drawdown on Wurrini and Djirrimini waterholes, prepared by WRM Water + Environment, dated 10 June 2021.</li> <li>Letter from MRM (A Hatfield) to DAWE (<a href="mailto:audit@environment.gov.au">audit@environment.gov.au</a>) titled “McArthur River Mine – EPBC 2014/7210 Condition 14 Aquatic Ecology Management Plan”, dated 12 June 2021.</li> </ol>	<p>An Aquatic Ecology Management has been prepared and submitted to DAWE on 12 June 2021. The plan was submitted 24 months from the EPBC approval date.</p> <p>Sections 3 and 4 and Appendix A of the Plan describe the Freshwater Sawfish monitoring plan. Figures 10 and 11 provides plans showing the location of the Freshwater Sawfish acoustic monitoring locations.</p> <p>Section 4 of the plan describes the aquatic fauna monitoring requirements.</p> <p>Section 5 of the plan describes surface water monitoring requirements and Appendix B provides a list of surface water quality monitoring locations.</p>	<b>Complies</b>
14 b.	include modelling of the extent and duration of drawdown on refuge pools in the dry season during operations;	<ul style="list-style-type: none"> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	<p>Aquatic Ecology Management Plan EPBC Approval 2014/7210, Revision 0, dated February 2020.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The Aquatic Ecology Management Plan (AEMP) was submitted to the Department on 12 June 2021. It is understood that the Department is now reviewing the AEMP.</p>	<ol style="list-style-type: none"> <li>Aquatic Ecology Management Plan EPBC Act Approval 2014/7210, Revision 0, dated 12 June 2021.</li> <li>Aquatic Ecology Management Plan Appendix A - McArthur River Mining, Freshwater Sawfish Monitoring Plan to address conditions of EPBC approval 2014/7210, Revision 0, prepared by Indopacific Environmental, dated 9 June 2021.</li> </ol>	<p>Appendix C of the plan describes the modelling of the extent and duration of drawdown on refuge pools.</p>	<b>Complies</b>
14 c.	include monitoring of refuge pools including for water quality and water level;	<ul style="list-style-type: none"> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	<p>Aquatic Ecology Management Plan EPBC Approval 2014/7210, Revision 0, dated February 2020.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The Aquatic Ecology Management Plan (AEMP) was submitted to the Department on 12 June 2021. It is understood that the Department is now reviewing the AEMP.</p>	<ol style="list-style-type: none"> <li>Aquatic Ecology Management Plan EPBC Act Approval 2014/7210, Revision 0, dated 12 June 2021.</li> <li>Aquatic Ecology Management Plan Appendix B - Surface Water Quality Monitoring Program.</li> </ol>	<p>Drawdown monitoring requirements are specified in Section 5.2 of the Plan and details provides in Appendix A (Section 6.2).</p> <p>Section 5 of the plan describes surface water monitoring requirements and Appendix B provides a list of surface water quality monitoring locations.</p>	<b>Complies</b>
14 d.	include a plan to monitor the health of the surface waters;	<ul style="list-style-type: none"> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	<p>Aquatic Ecology Management Plan EPBC Approval 2014/7210, Revision 0, dated February 2020.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The Aquatic Ecology Management Plan (AEMP) was submitted to the Department on 12 June 2021. It is understood that the Department is now reviewing the AEMP.</p>	<ol style="list-style-type: none"> <li>Aquatic Ecology Management Plan EPBC Act Approval 2014/7210, Revision 0, dated 12 June 2021.</li> <li>Aquatic Ecology Management Plan Appendix B - Surface Water Quality Monitoring Program.</li> </ol>	<p>Section 5 of the plan describes surface water monitoring requirements and Appendix B provides a list of surface water quality monitoring locations.</p>	<b>Complies</b>
14 e.	include a non-lethal monitoring program to measure the presence and abundance of Largetooth Sawfish;	<ul style="list-style-type: none"> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	<p>Aquatic Ecology Management Plan EPBC Approval 2014/7210, Revision 0, dated February 2020.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The Aquatic Ecology Management Plan (AEMP) was submitted to the Department on 12 June 2021. It is understood that the Department is now reviewing the AEMP.</p>	<ol style="list-style-type: none"> <li>Aquatic Ecology Management Plan EPBC Act Approval 2014/7210, Revision 0, dated 12 June 2021.</li> <li>Aquatic Ecology Management Plan Appendix A - McArthur River Mining, Freshwater Sawfish Monitoring Plan to address conditions of EPBC approval 2014/7210, Revision 0, prepared by Indopacific Environmental, dated 9 June 2021.</li> </ol>	<p>Sections 3 and 4 and Appendix A of the Plan describe the Freshwater Sawfish monitoring plan. Figures 10 and 11 provides plans showing the location of the Freshwater Sawfish acoustic monitoring locations.</p> <p>Section 4 of the plan describes the aquatic fauna monitoring requirements.</p> <p>The monitoring program covers non-lethal monitoring (acoustic monitoring / netting).</p>	<b>Complies</b>

14 f.	develop the triggers and corrective actions that will be implemented in the event that the monitoring required under condition 14c indicates that drawdown of refuge pools may impact on the Largetooth Sawfish and its habitat;	<ul style="list-style-type: none"> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	<p>Aquatic Ecology Management Plan EPBC Approval 2014/7210, Revision 0, dated February 2020.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The Aquatic Ecology Management Plan (AEMP) was submitted to the Department on 12 June 2021. It is understood that the Department is now reviewing the AEMP.</p>	<ol style="list-style-type: none"> <li>Aquatic Ecology Management Plan EPBC Act Approval 2014/7210, Revision 0, dated 12 June 2021.</li> </ol>	Section 4 of the Plan describes the Aquatic Fauna Monitoring Program Performance Triggers and corrective actions	<b>Complies</b>
14 g.	identify where supplementary water will be sourced, how sourced water will match the baseline water quality determined by implementing the requirements of condition 8, and describe a process for quality control if the corrective actions identified in condition 14f include supplementary watering of refuge pools; and	<ul style="list-style-type: none"> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	<p>Aquatic Ecology Management Plan EPBC Approval 2014/7210, Revision 0, dated February 2020.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – The Aquatic Ecology Management Plan (AEMP) was submitted to the Department on 12 June 2021. It is understood that the Department is now reviewing the AEMP.</p>	<ol style="list-style-type: none"> <li>Aquatic Ecology Management Plan Appendix D – Memorandum from MRM Superintendent Environment to MRM Senior Environmental Advisor, titled “Water Source for recharge of Wurrini waterhole” dated 9 June 2021.</li> </ol>	Appendix D of the plan identifies supplementary water sources and water quality requirements.	<b>Complies</b>
14 h.	demonstrate how the translocation is consistent with the Department’s EPBC Act Policy Statement on Translocation of Listed Threatened Species if the corrective actions required under 14f include translocation of the Largetooth Sawfish.	<ul style="list-style-type: none"> <li>Review contents of management plan against the requirements of this Condition.</li> </ul>	<p>Aquatic Ecology Management Plan EPBC Approval 2014/7210, Revision 0, dated February 2020.</p> <p>Interview: (Senior Environmental Advisor, S Fleming) – Condition 14h is only required if the corrective actions under 14f include translocation of the Largetooth Sawfish, which they do not.</p> <p>Refer to the extract from Section 5.2.5 of the AEMP submitted to DAWE in 2021: <i>“OMP EIS made mention of translocation of Freshwater Sawfish as a possible mitigation strategy for Mine-related drawdown. Although this option would be assessed on a case-by-case basis, it is considered unlikely that translocation of the one or two individuals which use Wurrini Waterhole as a dry season refuge pool would be consistent with the Department of Agriculture, Water and the Environment’s policy statement on Translocation of Listed Threatened Species (IPE, 2021). Therefore, translocation is not currently considered a stand-alone mitigation strategy.”</i></p>	<ol style="list-style-type: none"> <li>Aquatic Ecology Management Plan Appendix D – Memorandum from MRM Superintendent Environment to MRM Senior Environmental Advisor, titled “Water Source for recharge of Wurrini waterhole” dated 9 June 2021.</li> </ol>	Translocation of the Largetooth Sawfish is not considered (by MRM) to be a viable mitigation strategy and therefore this condition has not been triggered.	<b>Not Triggered</b>
<b>EPBC Approval Condition 15</b>		<b>To minimise the impact of weeds on foraging habitat and nesting habitat for the Gouldian Finch in the project footprint, the approval holder must implement the weed management plan provided to the Department as Appendix S of the Supplement to the Environmental Impact Statement from the commencement of the action.</b>				
		<b>Verification Method</b>	<b>Evidence</b>	<b>Documents Sighted</b>	<b>Determination</b>	<b>Compliance Finding</b>
15	To minimise the impact of weeds on foraging habitat and nesting habitat for the Gouldian Finch in the project footprint, the approval holder must implement the weed management plan provided to the Department as Appendix S of the Supplement to the Environmental Impact Statement from the commencement of the action.	<ul style="list-style-type: none"> <li>Review the weed management plan</li> <li>Audit the implementation of the weed management plan during the site inspection</li> <li>Review weed management records.</li> </ul>	Documentation as provided by MRM. Site inspection – weed management activities are being implemented in accordance with the Weed Management Plan.	<ol style="list-style-type: none"> <li>Weed Management Plan, Revision 0, 2018.</li> <li>Weed Control Forms (records of weed management actions taken by MRM) for the period 18/8/20 to 26/9/21.</li> </ol>	MRM is undertaking weed management activities in general accordance with the Weed Management Plan.	<b>Complies</b>

EPBC Approval Condition 16		To minimise impacts to EPBC Act listed species, the approval holder must assist The Regulator of Mines in the Northern Territory to establish an independent review committee to review matters related to the Northern Overburden Emplacement Facility, Tailings Storage Facility, water quality and health of the McArthur River for the life of the project and care and maintenance. The approval holder must provide the terms of reference and proposed membership to the Minister for approval. Any plans and reports submitted for approval to the Minister by the approval holder must be recommended as suitable for Ministerial approval by the independent review committee prior to submission.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
16	To minimise impacts to EPBC Act listed species, the approval holder must assist The Regulator of Mines in the Northern Territory to establish an independent review committee to review matters related to the Northern Overburden Emplacement Facility, Tailings Storage Facility, water quality and health of the McArthur River for the life of the project and care and maintenance. The approval holder must provide the terms of reference and proposed membership to the Minister for approval. Any plans and reports submitted for approval to the Minister by the approval holder must be recommended as suitable for Ministerial approval by the independent review committee prior to submission.	<ul style="list-style-type: none"> <li>Independent Review Committee Terms of Reference</li> <li>Independent Review Committee membership</li> <li>Minister correspondence approving Terms of Reference and membership</li> <li>Independent Review Committee meeting agendas and minutes</li> <li>Records of review of management plans</li> </ul>	Documentation as provided by MRM.	<ol style="list-style-type: none"> <li>Email from MRM (S Longhurst) to the Regulator of Mines (A Handley) titled "McArthur River Mine -updated Independent Panel Terms of Reference", dated 5 April 2022. The email (including previous train of emails and attachments) demonstrates that MRM has actively engaged with the Regulator of Mines to assist the Regulator establish Panel.</li> <li>NOEF Independent Panel for McArthur River Mine – Terms of Reference (Draft including updates addressing the Director Mining Operations Policy and Support Mining Operations (Mines Branch of the NT Dept of Industry, Tourism and Trade) comments.</li> </ol>	The establishment of the Independent Review Committee is the responsibility of the Northern Territory Regulator of Mines. At the time of this audit, the Regulator had not established the committee. The correspondence provided by MRM demonstrates that MRM has engaged with the Regulatory to assist in establishing the committee and that MRM has prepared and issued draft terms of reference to the Regulator. Therefore, the plans and reports submitted to DAWE to date have not been reviewed and endorsed by the committee and therefore a non-compliance has been recorded against this condition.	Complies

Administrative Condition 1		Notification of date of commencement of the action				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
1	The approval holder must notify the Department in writing of the date of commencement of the action within 10 business days after the date of commencement of the action.	<ul style="list-style-type: none"> <li>Review correspondence notifying the Department of the date of commencement of operations.</li> <li>Review Operational records</li> <li>Management interviews</li> </ul>	<ol style="list-style-type: none"> <li>Interview (S Fleming, MRM Senior Environmental Advisor) – MRM received approval of the OMP under the NT Mining Management Act 2001 on 13 November 2020. The OMP commencement under the EPBC Act occurred on 13 November 2020.</li> </ol>	<ol style="list-style-type: none"> <li>Letter from MRM (A Hatfield) to DAWE titled "McArthur River Mine Overburden Project – EPBC Approval 2014/7210", dated 17 November 2020.</li> </ol>	MRM Wrote to the Environmental Audit Section of DAWE on 17 November 2020 to advise that the Action commenced on 13 November 2020 following Approval of the Operations Management Plan by DITT. MRM Environmental Advisor confirmed the date of the Commencement of the Action.	Complies

Administrative Condition 2		If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
2	If the commencement of the action does not occur within 5 years from the date of this approval, then the approval holder must not commence the action without the prior written agreement of the Minister.	<ul style="list-style-type: none"> <li>Review confirmation that action has commenced.</li> </ul>	<ol style="list-style-type: none"> <li>Interview (S Fleming, MRM Senior Environmental Advisor) – MRM received approval of the OMP under the NT Mining Management Act 2001 on 13 November 2020. The OMP commencement under the EPBC Act occurred on 13 November 2020.</li> </ol>	<ol style="list-style-type: none"> <li>Letter from MRM (A Hatfield) to DAWE titled "McArthur River Mine Overburden Project – EPBC Approval 2014/7210", dated 17 November 2020.</li> <li>EPBC Approval 2014/7210, dated 12 June 2019,</li> </ol>	The EPBC Action was approved on 12 June 2019 and the Action commenced on 17 November 2020. Therefore, this condition was not triggered.	Not Triggered

Administrative Condition 3		Compliance Records				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
3	The approval holder must maintain accurate and complete compliance records.	<ul style="list-style-type: none"> <li>Review all compliance records, including monitoring, testing, reporting, auditing and verification reports and records.</li> </ul>	<ol style="list-style-type: none"> <li>Interview (S Fleming, MRM Senior Environmental Advisor) – MRM has developed an online Environmental Obligations Register, which enables action assignment, tracking and recording compliance against the full list of conditions for MRM's various environmental approvals.</li> </ol>	<ol style="list-style-type: none"> <li>Refer to conditions above</li> </ol>	MRM maintains an on-line compliance database. All records requested during the audit were made available to the Auditor.	Complies

Administrative Condition 4		If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
4	If the Department makes a request in writing, the approval holder must provide electronic copies of compliance records to the Department within the timeframe specified in the request.	<ul style="list-style-type: none"> <li>Review records of correspondence with DWE.</li> <li>If DWE has requested electronic copies of compliance records, review correspondence evidencing submission of records.</li> </ul>	<ol style="list-style-type: none"> <li>Interview: (Senior Environmental Advisor, S Fleming) – MRM provided a compliance table and supporting documents to the Department on 30 July 2020, in response to correspondence from the Department on 17 July 2020 seeking information to verify that MRM are compliant with EPBC Approval 2014/7210.</li> </ol>	<ol style="list-style-type: none"> <li>Email (including attachments) from MRM (C Bell) to DAWE (T Hart) titled EPBC 2014/7210: McArthur River Mining Pty Ltd”, dated 30 July 2020.</li> </ol>	One request for compliance records was received from DAWE during the audit period. MRM provided the requested records to DAWE electronically.	Complies

Administrative Condition 5		Submission and publication of plans The approval holder must: refer to 5a. to 5 d. below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
5 a.	The approval holder must: submit plans electronically to the Department for approval by the Minister;	<ul style="list-style-type: none"> <li>Review all records of plan submission to DWE and approval of plans by DWE.</li> </ul>	<ol style="list-style-type: none"> <li>Documentation as provided by MRM.</li> </ol>	<ol style="list-style-type: none"> <li>Letter from MRM (A Hatfield) to DAWE (<a href="mailto:audit@environment.gov.au">audit@environment.gov.au</a>) titled “McArthur River Mine – EPBC 2014/7210 Condition 14 Aquatic Ecology Management Plan”, dated 12 June 2021. Submission to DAWE relating to Condition 14.</li> </ol>	The Aquatic Fauna Management and Monitoring plan has been submitted electronically to DAWE in accordance with Administrative Condition 5a. The submission of the other plans required by this EPBC Approval have not yet been triggered.	Complies
5 b.	The approval holder must: publish each plan on the website within 20 business days of the date the plan is approved by the Minister or of the date a revised action management plan is submitted to the Minister, unless otherwise agreed to in writing by the Minister;	<ul style="list-style-type: none"> <li>Review project website (including for date of publishing)</li> </ul>	<ol style="list-style-type: none"> <li>Interview: (Senior Environmental Advisor, S Fleming) – DAWE did not approve any plans submitted under this EPBC Approval during the audit period.</li> </ol>	<ol style="list-style-type: none"> <li>Letter from MRM (A Hatfield) to DAWE (<a href="mailto:audit@environment.gov.au">audit@environment.gov.au</a>) titled “McArthur River Mine – EPBC 2014/7210 Condition 14 Aquatic Ecology Management Plan”, dated 12 June 2021. Submission to DAWE relating to Condition 14.</li> </ol>	DAWE did not approve any plans submitted under this EPBC Approval during the audit period.	Not Triggered
5 c.	The approval holder must: exclude or redact sensitive data or information from plans published on the website or provided to a member of the public; and	<ul style="list-style-type: none"> <li>Review project website and correspondence providing plans to a member of the public against full plans</li> </ul>	<ol style="list-style-type: none"> <li>Interview: (Senior Environmental Advisor, S Fleming) – DAWE did not approve any plans submitted under this EPBC Approval during the audit period.</li> </ol>		DAWE did not approve any plans submitted under this EPBC Approval during the audit period.	Not Triggered
5 d.	The approval holder must: keep plans published on the website until the end date of this approval.	<ul style="list-style-type: none"> <li>Review project website</li> </ul>	<ol style="list-style-type: none"> <li>Interview: (Senior Environmental Advisor, S Fleming) – DAWE did not approve any plans submitted under this EPBC Approval during the audit period.</li> </ol>		DAWE did not approve any plans submitted under this EPBC Approval during the audit period.	Not Triggered

Administrative Condition 6		The approval holder must ensure that any monitoring data (including sensitive data or information), surveys, maps, and other spatial and metadata required under the conditions of this approval, is prepared in accordance with the Department’s Guidelines for biological survey and mapped data (2018) and submitted electronically to the Department in accordance with the requirements of conditions.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
6	The approval holder must ensure that any monitoring data (including sensitive data or information), surveys, maps, and other spatial and metadata required under the conditions of this approval, is prepared in accordance with the Department’s Guidelines for biological survey and mapped data (2018) and submitted electronically to the Department in accordance with the requirements of conditions.	<ul style="list-style-type: none"> <li>Review of all monitoring data</li> <li>Review correspondence evidencing submission to DWE</li> </ul>	<p>Interview: (Senior Environmental Advisor, S Fleming) – No data has been submitted to DAWE as no plan requiring monitoring has yet been approved.</p>		No monitoring data was required to be submitted to DAWE during the audit period.	Not Triggered

Administrative Condition 7		Annual compliance reporting The approval holder must prepare a compliance report for each 12-month period following the date of commencement of the action, or as otherwise agreed to in writing by the Minister. Note: Compliance reports may be published on the Department's website. The first compliance report may report a period less than 12 months so that it and subsequent compliance reports aligns with the similar requirement under state approval. The approval holder must: refer to 7 a. to 7 f. below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
7	The approval holder must prepare a compliance report for each 12-month period following the date of commencement of the action, or as otherwise agreed to in writing by the Minister. Note: Compliance reports may be published on the Department's website. The first compliance report may report a period less than 12 months so that it and subsequent compliance reports aligns with the similar requirement under state approval.	<ul style="list-style-type: none"> <li>Review compliance reports</li> <li>Review correspondence evidencing submission to DWE</li> </ul>	Documentation as provided by MRM.	<ol style="list-style-type: none"> <li>Compliance Report EPBC 2014/7210 13 November 2020 to 12 November 2021.</li> <li>Environmental Monitoring Report 2020 – 2021, 1 May 2020 to 30 April 2021, issued August 2021.</li> <li>Annual Report Card 2021 Independent Monitoring and Reporting on Data from 1 May 2020 to 30 April 2021, prepared by Advisan.</li> </ol>	The first Environment Compliance Report has been prepared and submitted to DAWE in accordance with this Condition.	Complies
7 a.	The approval holder must: publish each compliance report on the website within 60 business days following the relevant 12-month period and remain published for the life of the project;	<ul style="list-style-type: none"> <li>Review project website (including for date of publishing)</li> </ul>	Documentation as provided by MRM. MRM Website ( <a href="https://www.glencore.com.au/dam/jcr:52989737-f2fd-4e5d-90fd-d4909cf161c1/2020-21%20Compliance%20Report%20McArthur%20River%20Mine%20EPBC%202014-7210.pdf">https://www.glencore.com.au/dam/jcr:52989737-f2fd-4e5d-90fd-d4909cf161c1/2020-21%20Compliance%20Report%20McArthur%20River%20Mine%20EPBC%202014-7210.pdf</a> )	<ol style="list-style-type: none"> <li>Compliance Report EPBC 2014/7210 13 November 2020 to 12 November 2021.</li> </ol>	The first Environment Compliance Report has been prepared and published on the company website.	Complies
7 b.	The approval holder must: notify the Department by email that a compliance report has been published on the website within five business days of the date of publication;	<ul style="list-style-type: none"> <li>Review project website</li> <li>Review notifications provided to DWE</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – no compliance reports were issued during the Audit Period.		The first compliance report required by this approval was finalised in August 2021, which is outside of this audit period.	Not Triggered
7 c.	The approval holder must: keep all compliance reports publicly available on the website until this approval expires;	<ul style="list-style-type: none"> <li>Review project website.</li> </ul>	MRM Website ( <a href="https://www.glencore.com.au/dam/jcr:52989737-f2fd-4e5d-90fd-d4909cf161c1/2020-21%20Compliance%20Report%20McArthur%20River%20Mine%20EPBC%202014-7210.pdf">https://www.glencore.com.au/dam/jcr:52989737-f2fd-4e5d-90fd-d4909cf161c1/2020-21%20Compliance%20Report%20McArthur%20River%20Mine%20EPBC%202014-7210.pdf</a> )	<ol style="list-style-type: none"> <li>Compliance Report EPBC 2014/7210 13 November 2020 to 12 November 2021.</li> </ol>	The first Environment Compliance Report has been prepared and published on the company website.	Complies
7 d.	The approval holder must: exclude or redact sensitive data or information from compliance reports published on the website;	Not auditable – noted				Noted
7 e.	The approval holder must: where any sensitive data or information has been excluded from the version published, submit the full compliance report to the Department within 5 business days of publication.	Not Auditable - noted				Noted
7 f.	The approval holder must: include monitoring information for the relevant period in accordance with Part B condition 6. The proponent must also submit to the Minister all monitoring data (in spreadsheet format) for the relevant period in accordance with Part B Condition 6 to accompany the compliance report.	<ul style="list-style-type: none"> <li>Review project website.</li> <li>Review all monitoring data reports submitted to DWE.</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – Part B Condition 6 requires submitted data to be prepared in accordance with the Department's guidelines. No data has been submitted as no plan requiring monitoring has yet been approved.	<ol style="list-style-type: none"> <li>Compliance Report EPBC 2014/7210 13 November 2020 to 12 November 2021.</li> <li>Environmental Monitoring Report 2020 – 2021, 1 May 2020 to 30 April 2021, issued August 2021.</li> <li>Annual Report Card 2021 Independent Monitoring and Reporting on Data from 1 May 2020 to 30 April 2021, prepared by Advisan.</li> </ol>	The Adaptive Management Plan required by Part B Condition 6 has not been triggered, therefore no monitoring data, in accordance with that condition has been included in the 2020 – 2021 Compliance Report. The Auditor that notes that MRM has undertaken extensive monitoring and testing as required under the NT State approvals. As Part B Condition 6 has not been triggered, monitoring data required under that condition has not been provided to DAWE.	Not Triggered

Administrative Condition 8		Reporting non-compliance The approval holder must notify the Department in writing of any: incident; noncompliance with the conditions; or non-compliance with the commitments made in plans. The notification must be given as soon as practicable, and no later than two business days after becoming aware of the incident or non-compliance. The notification must specify: refer to 8 a and 8 b below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
8 a.	The notification must specify: the condition which is or may be in breach; and	<ul style="list-style-type: none"> <li>Review incident records</li> <li>Review notifications to DWE</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – No incidents or non-compliances were recorded during the audit period.		No reportable incidents occurred during the audit period.	Not Triggered
8 b.	The notification must specify: a short description of the incident and/or non-compliance.	<ul style="list-style-type: none"> <li>Review compliance records</li> <li>Review incident records</li> <li>Review notifications to DWE</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – No incidents or non-compliances were recorded during the audit period.		No reportable incidents occurred during the audit period.	Not Triggered

Administrative Condition 9		The approval holder must provide to the Department the details of any incident or non-compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance, specifying: refer to 9a to 9 c below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
9	The approval holder must provide to the Department the details of any incident or non-compliance with the conditions or commitments made in plans as soon as practicable and no later than 10 business days after becoming aware of the incident or non-compliance.	<ul style="list-style-type: none"> <li>Review all compliance / incident reports</li> <li>Review submission correspondence</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – No incidents or non-compliances were recorded during the audit period.		No non-compliances against the approval were identified by MRM during the audit period.	Not Triggered
9 a.	The reports must include: any corrective action or investigation which the approval holder has already taken or intends to take in the immediate future;	<ul style="list-style-type: none"> <li>Review all compliance / incident reports</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – No incidents or non-compliances were recorded during the audit period.		No non-compliances against the approval were identified by MRM during the audit period.	Not Triggered
9 b.	The reports must include: the potential impacts of the incident or non-compliance; and	<ul style="list-style-type: none"> <li>Review all compliance / incident reports</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – No incidents or non-compliances were recorded during the audit period.		No non-compliances against the approval were identified by MRM during the audit period.	Not Triggered
9 c.	The reports must include: the method and timing of any remedial action that will be undertaken by the approval holder.	<ul style="list-style-type: none"> <li>Review all compliance / incident reports</li> </ul>	Interview: (Senior Environmental Advisor, S Fleming) – No incidents or non-compliances were recorded during the audit period.		No non-compliances against the approval were identified by MRM during the audit period.	Not Triggered

Administrative Condition 10		The approval holder must ensure that independent audits of compliance with the conditions are conducted for the 12 month period from the commencement of the action and for every subsequent 12 month period or as otherwise requested in writing by the Minister.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
10	The approval holder must ensure that independent audits of compliance with the conditions are conducted for the 12-month period from the commencement of the action and for every subsequent 12 month period or as otherwise requested in writing by the Minister.	<ul style="list-style-type: none"> <li>Independent Audit Schedule</li> <li>Correspondence evidencing commissioning of Independent Audit.</li> </ul>	Barnett and May Audit Proposal MRM Purchase Order	<ol style="list-style-type: none"> <li>Barnett and May EPBC Independent Audit Proposal dated 24 October 2021.</li> <li>MRM Purchase Order to Barnett and May for the</li> </ol>	This Independent Audit is the first audit of compliance against the Conditions of EPBC Approval. The Audit Period set by the Auditor covered the period 13 November 2020 to 30 November 2021.	<b>Complies</b>

Administrative Condition 11		For each independent audit, the approval holder must: refer to 11 a to 11 c below.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
11 a.	The approval holder must provide the name and qualifications of the independent auditor and the draft audit criteria to the Department;	<ul style="list-style-type: none"> <li>Review correspondence from DWE approving the Independent Auditor</li> </ul>	Documentation as provided by MRM.	<ol style="list-style-type: none"> <li>Letter from DAWE (T Hart) to MRM (S Longhurst) titled "Re: McArthur River Mine Overburden Management Project (EPBC 2014/7210) – Approval of independent auditor", dated 29 November 2021.</li> </ol>	DAWE approved the appoint of the Environmental Auditor in November 2021.	<b>Complies</b>
11 b.	The approval holder must only commence the independent audit once the audit criteria have been approved in writing by the Department; and	<ul style="list-style-type: none"> <li>Review correspondence from DWE approving these audit criteria</li> </ul>	Documentation as provided by MRM.	<ol style="list-style-type: none"> <li>Letter from DAWE (T Hart) to MRM (S Longhurst) titled "Re: McArthur River Mine Overburden Management Project, Gulf Region NT, (EPBC 2014/7210) – Approval of audit criteria", dated 22 April 2022.</li> </ol>	DAWE approved the Audit Criteria on 22 April 2022. The audit commenced on 27 April 2022.	<b>Complies</b>
11 c.	The approval holder must submit an audit report to the Department within the timeframe specified in the approved audit criteria.	<ul style="list-style-type: none"> <li>2022 Independent Environmental Audit Report</li> </ul>			This audit report will be submitted after completion of this report.	Not triggered

<b>Administrative Condition 12</b>		<b>The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on the website until the end date of this approval.</b>				
		<b>Verification Method</b>	<b>Evidence</b>	<b>Documents Sighted</b>	<b>Determination</b>	<b>Compliance Finding</b>
12	The approval holder must publish the audit report on the website within 10 business days of receiving the Department's approval of the audit report and keep the audit report published on the website until the end date of this approval.	<ul style="list-style-type: none"> <li>2022 Independent Environmental Audit Report</li> </ul>			This audit report will be submitted after completion of this report.	Not triggered
<b>Administrative Condition 13</b>		<b>The approval holder may, at any time, apply to the Minister for a variation to an action management plan approved by the Minister under Part B conditions 6, 7 and 13 or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the EPBC Act. If the Minister approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management plan.</b>				
		<b>Verification Method</b>	<b>Evidence</b>	<b>Documents Sighted</b>	<b>Determination</b>	<b>Compliance Finding</b>
13	The approval holder may, at any time, apply to the Minister for a variation to an action management plan approved by the Minister under Part B conditions 6, 7 and 13 or as subsequently revised in accordance with these conditions, by submitting an application in accordance with the requirements of section 143A of the EPBC Act. If the Minister approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of the previous action management plan.	<ul style="list-style-type: none"> <li>Review revision history of and DWE approval of all management plans.</li> <li>If relevant review applications under section 143A and subsequent reviews and approvals by DWE.</li> </ul>	Compliance assessment of Condition 6, 7 and 13 above.		At the time of this audit, only the Condition 13 Management Plan had been completed and issued to DAWE for review and approval. That plan has not been modified.	Not triggered
<b>Administrative Condition 14</b>		<b>The approval holder may choose to revise an action management plan approved by the Minister under Part B conditions 6, 7 and 13 or as subsequently revised in accordance with these conditions, without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the RAMP would not be likely to have a new or increased impact.</b>				
		<b>Verification Method</b>	<b>Evidence</b>	<b>Documents Sighted</b>	<b>Determination</b>	<b>Compliance Finding</b>
14	The approval holder may choose to revise an action management plan approved by the Minister under Part B conditions 6, 7 and 13 or as subsequently revised in accordance with these conditions, without submitting it for approval under section 143A of the EPBC Act, if the taking of the action in accordance with the RAMP would not be likely to have a new or increased impact.	<ul style="list-style-type: none"> <li>Review any plans revised under this condition.</li> </ul>	Compliance assessment of Condition 6, 7 and 13 above.		At the time of this audit, only the Condition 13 Management Plan had been completed and issued to DAWE for review and approval. That plan has not been modified.	Not triggered

<b>Administrative Condition 15</b>		<b>If the approval holder makes the choice under Part B condition 14 to revise an action management plan without submitting it for approval, the approval holder must: refer to 15 a and 15 b below.</b>				
		<b>Verification Method</b>	<b>Evidence</b>	<b>Documents Sighted</b>	<b>Determination</b>	<b>Compliance Finding</b>
15 a.	The approval holder must: notify the Department in writing that the approved action management plan has been revised and provide the Department with: 1. an electronic copy of the RAMP; 2. an electronic copy of the RAMP marked up with track changes to show the differences between the approved action management plan and the RAMP; 3. an explanation of the differences between the approved action management plan and the RAMP; 4. the reasons the approval holder considers that taking the action in accordance with the RAMP would not be likely to have a new or increased impact; and 5. written notice of the date on which the approval holder will implement the RAMP (RAMP implementation date), being at least 20 business days after the date of providing notice of the revision of the action management plan, or a date agreed to in writing with the Department.	<ul style="list-style-type: none"> <li>Review any plans revised under this condition.</li> <li>Review documentation evidencing submission and approval of revised plans.</li> </ul>	Compliance assessment of Condition 6, 7 and 13 above.		At the time of this audit, only the Condition 13 Management Plan had been completed and issued to DAWE for review and approval. That plan has not been modified.	Not triggered
15 b.	The approval holder must: subject to condition 14, implement the RAMP from the RAMP implementation date.	<ul style="list-style-type: none"> <li>Audit implementation of revised plans (site inspection / document reviews)</li> </ul>	Compliance assessment of Condition 6, 7 and 13 above.		At the time of this audit, only the Condition 13 Management Plan had been completed and issued to DAWE for review and approval. That plan has not been modified.	Not triggered
<b>Administrative Condition 16</b>		<b>The approval holder may revoke its choice to implement a RAMP under Part B condition 15 at any time by giving written notice to the Department. If the approval holder revokes the choice under Part B condition 15, the approval holder must implement the previous action management plan approved by the Minister.</b>				
		<b>Verification Method</b>	<b>Evidence</b>	<b>Documents Sighted</b>	<b>Determination</b>	<b>Compliance Finding</b>
16	The approval holder may revoke its choice to implement a RAMP under Part B condition 15 at any time by giving written notice to the Department. If the approval holder revokes the choice under Part B condition 15, the approval holder must implement the previous action management plan approved by the Minister.	<ul style="list-style-type: none"> <li>Review all currently implemented plans.</li> </ul>	Compliance assessment of Condition 6, 7 and 13 above.		At the time of this audit, only the Condition 13 Management Plan had been completed and issued to DAWE for review and approval. That plan has not been modified.	Not triggered
<b>Administrative Condition 17</b>		<b>If the Minister gives a notice to the approval holder that the Minister is satisfied that the taking of the action in accordance with the RAMP would be likely to have a new or increased impact, then: refer to 17 a and 17 b below.</b>				
		<b>Verification Method</b>	<b>Evidence</b>	<b>Documents Sighted</b>	<b>Determination</b>	<b>Compliance Finding</b>
17 a.	Part B condition 15 does not apply, or ceases to apply, in relation to the RAMP; and				Noted, not auditable.	Noted
17 b.	the approval holder must implement the action management plan specified by the Minister in the notice.	<ul style="list-style-type: none"> <li>Review all documentation from the Minister in relation to management plans.</li> <li>Audit compliance with any directions from the Minister in relation to this Condition.</li> </ul>	Compliance assessment of Condition 6, 7 and 13 above.		At the time of this audit, only the Condition 13 Management Plan had been completed and issued to DAWE for review and approval. That plan has not been modified.	Not triggered



Administrative Condition 18		At the time of giving the notice under Part B condition 17, the Minister may also notify that for a specified period of time, Part B condition 15 does not apply for one or more specified action management plans.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
18	At the time of giving the notice under Part B condition 17, the Minister may also notify that for a specified period of time, Part B condition 15 does not apply for one or more specified action management plans.				Noted, not auditable.	Noted

Administrative Condition 19		All management plans required under this approval should be prepared in line with the Department's Environmental Management Plan Guidelines.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
19	All management plans required under this approval should be prepared in line with the Department's Environmental Management Plan Guidelines.	view of all management plans against the Department's requirements.	Documents as provided by MRM.	<ol style="list-style-type: none"> <li>1. Aquatic Ecology Management Plan EPBC Act Approval 2014/7210, Revision 0, dated 12 June 2021.</li> <li>2. Environmental Management Plan Guidelines 2014, Department of the Environment.</li> </ol>	<p>The Aquatic Ecology Management Plan was reviewed against the requirements of Section 3 (Contents of the Environmental Management Plan) of the 2014 Guideline:</p> <p>Section 3.1 of the Guideline describes the requirements for the cover / title page of the plan. The AEMP does not meet the cover page contents requirements and a declaration of accuracy has not been included in the Plan.</p> <p>Section 3.2 of the Guideline prescribes the requirements for a document version control section that shows changes over the time. A document revision table has not been provided.</p> <p>Section 3.3 of the Guideline that requires the inclusion of a table of contents has been satisfied.</p> <p>Section 3.4 of the Guideline (Executive Summary / Introduction) has been satisfied.</p> <p>Section 3.5 of the Plan specifies the requirements for an approval reference table. A reference table has not been included in the Plan.</p> <p>Section 3.6 of the Guideline that requires the inclusion of a project description has been satisfied.</p> <p>Section 3.7 of the Guideline that requires the inclusion of environmental objectives has been satisfied.</p> <p>Section 3.8 of the Guideline requires the inclusion of roles and responsibilities. Environmental roles and responsibilities have not been included.</p> <p>Section 3.9 of the Guideline that requires a description reporting requirements has not been satisfied.</p> <p>Section 3.10 of the Guideline that requires the inclusion training requirements. No reference to training requirement is provided.</p> <p>Section 3.11 of the Guideline that requires the inclusion of emergency contacts has not been satisfied.</p> <p>Section 3.12 of the Guideline that requires the identification of environmental impacts and risks has not been satisfied.</p> <p>Section 3.13 of the Guideline that requires the inclusion of management measures has not been satisfied.</p> <p>Section 3.14, Audit and Review has been satisfied.</p> <p>Section 3.15 of the Guideline that requires the inclusion of a glossary has not been satisfied.</p>	<b>Non-Compliance</b>

Administrative Condition 20		Within 30 days after the completion of the action, the approval holder must notify the Department in writing and provide completion data.				
		Verification Method	Evidence	Documents Sighted	Determination	Compliance Finding
20	Within 30 days after the completion of the action, the approval holder must notify the Department in writing and provide completion data.					Not Triggered

# Audit Photos

## Appendix B



*Photograph 1 - McArthur River Upstream of mine (SW7)*



*Photograph 2 McArthur River downstream of mine (SW12).*



*Photograph 3 - Typical Perimeter Fencing*



*Photograph 4 - Gouldian Finch Habitat on the North-Eastern edge of the mining lease.*



*Photograph 6 - Surface Water Sampling Point Marker*



*Photograph 5 - McArthur River Flow Gauge*



*Photograph 7 - NOEF expansion civil works*



# DAWE – Auditor Approval

Appendix C



**Australian Government**  
**Department of Agriculture,  
Water and the Environment**

Our reference: EPBC 2014/7210

Mr Simon Longhurst  
Superintendent - Environment  
Glencore (McArthur River Mining Pty Ltd) – McArthur River Mine

By email: [simon.longurst@glencore.com.au](mailto:simon.longurst@glencore.com.au)

Dear Mr Longhurst,

**Re: McArthur River Mine Overburden Management  
Project (EPBC 2014/7210) – Approval of independent auditor**

I refer to your email of 5 November 2021 where you submitted your nominated auditor to undertake the annual compliance audit required under Part B, condition 10 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval 2014/7210.

Officers of the Department of Agriculture, Water and the Environment (the department) have reviewed the auditor nomination and consider that Mr Ken Holmes from *Barnett and May Pty Ltd* is suitably qualified and experienced to complete the annual compliance audit of the McArthur River Mine project.

As delegate of the Minister for the Environment, I am writing to inform you that I approve Mr Ken Holmes as the independent auditor to undertake the first annual compliance audit of the EPBC 2014/7210 project.

In accordance with condition 11.a of EPBC 2014/7210, please provide the draft audit criteria for departmental approval.

Should you require any further information, or like to discuss this matter further, please contact Mr Nicholas Scholar on (02) 6274 1284 or by email at [audit@environment.gov.au](mailto:audit@environment.gov.au).

Yours sincerely

A handwritten signature in black ink, appearing to read 'Toni Hart', written over a circular stamp or seal.

Toni Hart  
Director  
Environmental Audit Section  
29 November 2021